UNIT-I

BASICS OF ACCOUNTING

CONCEPTS

1. Introduction of Financial Accounting
2. Function of an Accountant
3. Users of Accounting
4. Advantages of Accounting
5. Limitations of Accounting
6. Book-keeping and Accounting
7. Accounting Cycle
8. Basic Accounting Concepts
9. Journal
10. Ledger
11. Trial Balance
12. Cash Book
13. Bank Reconciliation Statement

1. INTRODUCITON

As you are aware, every trader generally starts business for purpose of earning profit. While establishing business, he brings own capital, borrows money from relatives, friends, outsiders or financial institutions. Then he purchases machinery, plant, furniture, raw materials and other assets. He starts buying and selling of goods, paying for salaries, rent and other expenses, depositing and withdrawing cash from bank. Like this he undertakes innumerable transactions in business. Observe the following transactions of small trader for one week during the month of July, 1998.

1998		Rs.
July 24	Purchase of goods from Sree	12,000
July 25	Goods sold for cash	5,000
July 25	Sold gods to Syam on credit	8,000
July 26	Advertising expenses	5,200
July 27	Stationary expenses	600
July 27	Withdrawal for personal use	2,500
July 28	Rent paid through cheque	1,000
July 31	Salaries paid	9,000
July 31	Received cash from Syam	5,000

The number of transactions in an organization depends upon the size of the organization. In small organizations, the transactions generally will be in thousand and in big organizations they may be in lakhs. As such it is humanly impossible to remember all these transactions. Further, it may not by possible to find out the final result of the business without recording and analyzing these transactions.

Accounting came into practice as an aid to human memory by maintaining a systematic record of business transactions.

1.1 History of Accounting:

Accounting is as old as civilization itself. From the ancient relics of Babylon, it can be will proved that accounting did exist as long as 2600 B.C. However, in modern form accounting based

on the principles of Double Entry System came into existence in 17th Century. Fra Luka Paciolo, a Fransiscan monk and mathematician published a book *De computic et scripturies* in 1494 at Venice in Italyl. This book was translated into English in 1543. In this book he covered a brief section on 'book-keeping'.

1.2 Origin of Accounting in India:

Accounting was practiced in India thousand years ago and there is a clear evidence for this. In his famous book *Arthashastra* Kautilya dealt with not only politics and economics but also the art of proper keeping of accounts. However, the accounting on modern lines was introduced in India after 1850 with the formation joint stock companies in India.

Accounting in India is now a fast developing discipline. The two premier Accounting Institutes in India viz., chartered Accountants of India and the Institute of Cost and Works Accountants of India are making continuous and substantial contributions. The international Accounts Standards Committee (IASC) was established as on 29th June. In India the 'Accounting Standards Board (ASB) is formulating 'Accounting Standards' on the lines of standards framed by International Accounting Standards Committee.

1.3 Meaning of Accounting

Thus, book-keeping is an art of recording the business transactions in the books of original entry and the ledges. Accountancy begins where Book-keeping ends. Accountancy means the compiliation of accounts in such a way that one is in a position to know the state of affairs of the business. The work of an accountant is to analyse, interpret and review the accounts and draw conclusion with a view to guide the management in chalking out the future policy of the business.

1.4 Definition of Accounting:

Smith and Ashburne: "Accounting is a means of measuring and reporting the results of economic activities."

R.N. Anthony: "Accounting system is a means of collecting summarizing, analyzing and reporting in monetary terms, the information about the business.

American Institute of Certified Public Accountants (AICPA): "The art of recording, classifying and summarizing in a significant manner and in terms of money transactions and events, which are in part at least, of a financial character and interpreting the results thereof."

Thus, accounting is an art of identifying, recording, summarizing and interpreting business transactions of financial nature. Hence accounting is the Language of Business.

1.5 Branches of Accounting:

The important branches of accounting are:

1. Financial Accounting: The purpose of Accounting is to ascertain the financial results i.e. profit or loass in the operations during a specific period. It is also aimed at knowing the financial position, i.e. assets, liabilities and equity position at the end of the period. It also provides other relevant information to the management as a basic for decision-making for planning and controlling the operations of the business.
2. Cost Accounting: The purpose of this branch of accounting is to ascertain the cost of a product / operation / project and the costs incurred for carrying out various activities. It also assist the management in controlling the costs. The necessary data and information are gatherr4ed form financial and other sources.
3. Management Accounting : Its aim to assist the management in taking correct policy decision and to evaluate the impact of its decisions and actions. The data required for this purpose are drawn accounting and cost-accounting.

4. Inflation Accounting : It is concerned with the adjustment in the values of assest and of profit in light of changes in the price level. In a way it is concerned with the overcoming of limitations that arise in financial statements on account of the cost assumption (i.e recording of the assets at their historical or original cost) and the assumption of stable monetary unit.
5. Human Resource Accounting : It is a branch of accounting which seeks to report and emphasize the importance of human resources in a company's earning process and total assets. It is concerned with the process of identifying and measuring data about human resources and communicating this information to interested parties. In simple words, it is accounting for people as organizational resources.

2. FUNCTIONS OF AN ACCOUNTANT

The job of an accountant involves the following types of accounting works:

1. Designing Work: It includes the designing of the accounting system, basis for identification and classification of financial transactions and events, forms, methods, procedures, etc.
2. Recording Work: The financial transactions are identified, classified and recorded in appropriate books of accounts according to principles. This is "Book Keeping". The recording of transactions tends to be mechanical and repetitive.
3. Summarizing Work: The recorded transactions are summarized into significant form according to generally accepted accounting principles. The work includes the preparation of profit and loss account, balance sheet. This phase is called 'preparation of final accounts'
4. Analysis and Interpretation Work: The financial statements are analysed by using ratio analysis, break-even analysis, funds flow and cash flow analysis.
5. Reporting Work: The summarized statements along with analysis and interpretation are communicated to the interested parties or whoever has the right to receive them. For Ex. Share holders. In addition, the accou8nting departments has to prepare and send regular reports so as to assist the management in decision making. This is 'Reporting'.
6. Preparation of Budget: The management must be able to reasonably estimate the future requirements and opportunities. As an aid to this process, the accountant has to prepare budgets, like cash budget, capital budget, purchase budget, sales budget etc. this is 'Budgeting'.
7. Taxation Work: The accountant has to prepare various statements and returns pertaining to income-tax, sales-tax, excise or customs duties etc., and file the returns with the authorities concerned.
8. Auditing: It involves a critical review and verification of the books of accounts statements and reports with a view to verifying their accuracy. This is 'Auditing'

This is what the accountant or the accounting department does. A person may be placed in any part of Accounting Department or MIS (Management Information System) Department or in small organization; the same person may have to attend to all this work.

3. USERS OF ACCOUNTING INFORMATION

Different categories of users need different kinds of information for making decisions. The users of accounting can be divided in two board groups (1). Internal users and (2). External users.

4.1 Internal Users:

Managers: These are the persons who manage the business, i.e. management at he top, middle and lower levels. Their requirements of information are different because they make different types of decisions.

Accounting reports are important to managers for evaluating the results of their decisions. In

additions to external financial statements, managers need detailed internal reports either branch division or department or product-wise. Accounting reports for managers are prepared much more frequently than external reports.

Accounting information also helps the managers in appraising the performance of subordinates. As such Accounting is termed as " the eyes and ears of management."

4.2 External Users:

1. Investors: Those who are interested in buying the shares of company are naturally interested in the financial statements to know how safe the investment already made is and how safe the proposed investments will be.

2. Creditors: Lenders are interested to know whether their load, principal and interest, will be paid when due. Suppliers and other creditors are also interested to know the ability of the firm to pay their dues in time.

3. Workers: In our country, workers are entitled to payment of bonus which depends on the size of profit earned. Hence, they would like to be satisfied that he bonus being paid to them is correct. This knowledge also helps them in conducting negotiations for wages.

4. Customers: They are also concerned with the stability and profitability of the enterprise. They may be interested in knowing the financial strength of the company to rent it for further decisions relating to purchase of goods.

5. Government:Governments all over the world are using financial statements for compiling statistics concerning business which, in turn, helps in compiling national accounts. The financial statements are useful for tax authorities for calculating taxes.

6. Public : The public at large interested in the functioning of the enterprises because it may make a substantial contribution to the local economy in many ways including the number of people employed and their patronage to local suppliers.

7. Researchers: The financial statements, being a mirror of business conditions, is of great interest to scholars undertaking research in accounting theory as well as business affairs and practices.

4. ADVANTAGES FROM ACCOUNTING

The role of accounting has changed from that of a mere record keeping during the 1st decade of 20th century of the present stage, which it is accepted as information system and decision making activity. The following are the advantages of accounting.

1. Provides for systematic records: Since all the financial transactions are recorded in the books, one need not rely on memory. Any information required is readily available from these records.
2. Facilitates the preparation of financial statements: Profit and loss accountant and balance sheet can be easily prepared with the help of the information in the records. This enables the trader to know the net result of business operations (i.e. profit / loss) during the accounting period and the financial position of the business at the end of the accounting period.
3. Provides control over assets: Book-keeping provides information regarding cash in had, cash at bank, stock of goods, accounts receivables from various parties and the amounts invested in various other assets. As the trader knows the values of the assets he will have control over them.

4. Provides the required information: Interested parties such as owners, lenders, creditors etc., get necessary information at frequent intervals.
5. Comparative study: One can compare the present performance of the organization with that of its past. This enables the managers to draw useful conclusion and make proper decisions.
6. Less Scope for fraud or theft: It is difficult to conceal fraud or theft etc., because of the balancing of the books of accounts periodically. As the work is divided among many persons, there will be check and counter check.
7. Tax matters: Properly maintained book-keeping records will help in the settlement of all tax matters with the tax authorities.
8. Ascertaining Value of Business: The accounting records will help in ascertaining the correct value of the business. This helps in the event of sale or purchase of a business.
9. Documentary evidence: Accounting records can also be used as an evidence in the court to substantiate the claim of the business. These records are based on documentary proof. Every entry is supported by authentic vouchers. As such, Courts accept these records as evidence.
10. Helpful to management: Accounting is useful to the management in various ways. It enables the management to asses the achievement of its performance. The weakness of the business can be identified and corrective measures can be applied to remove them with the helps accounting.

5. LIMITATIONS OF ACCOUNTING

The following are the limitations of accounting.

1. Does not record all events: Only the transactions of a financial character will be recorded under book-keeping. So it does not reveal a complete picture about the quality of human resources, location advantage, business contacts etc.
2. Does not reflect current values: The data available under book-keeping is historical in nature. So they do not reflect current values. For instance, we record the value of stock at cost price or market price, whichever is less. In case of, building, machinery etc., we adopt historical cost as the basis. In fact, the current values of buildings, plant and machinery may be much more than what is recorded in the balance sheet.
3. Estimates based on Personal Judgment: The estimate used for determining the values of various items may not be correct. For example, debtor is estimated in terms of collectability, inventories are based on marketability, and fixed assets are based on useful working life. These estimates are based on personal judgment and hence sometimes may not be correct.
4. Inadequate information on costs and Profits: Book-keeping only provides information about the overall profitability of the business. No information is given about the cost and profitability of different activities of products or divisions.

6. BOOK-KEEPING AND ACCOUNTING

According to G.A. Lee the accounting system has two stages.

1. The making of routine records in the prescribed from and according to set rules of all events with affect the financial state of the organization; and
2. The summarization from time to time of the information contained in the records, its presentation in a significant form to interested parties and its interpretation as an aid to decision making by these parties.

First stage is called Book-Keeping and the second one is Accounting.

Book – Keeping: Book – Keeping involves the chronological recording of financial transactions in a set of books in a systematic manner.

Accounting: Accounting is concerned with the maintenance of accounts giving stress to the design

of the system of records, the preparation of reports based on the recorded date and the interpretation of the reports.

Distinction between Book – Keeping and Accountancy

Thus, the terms, book-keeping and accounting are very closely related, through there is a subtle difference as mentioned below.

1. Object : The object of book-keeping is to prepare original books of Accounts. It is restricted to journal, subsidiary book and ledge accounts only. On the other hand, the main object of accounting is to record analyse and interpret the business transactions.
2. Level of Work: Book-keeping is restricted to level of work. Clerical work is mainly involved in it. Accountancy on the other hand, is concerned with all level of management.
3. Principles of Accountancy: In Book-keeping Accounting concepts and conventions will be followed by all without any difference. On the other hand, various firms follow various methods of reporting and interpretation in accounting.
3. Final Result: In Book-Keeping it is not possible to know the final result of business every year,

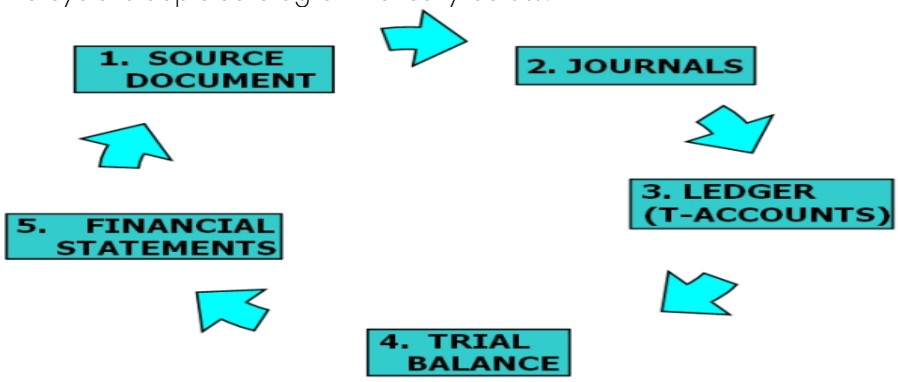
7. ACCOUNTING CYCLE

Accounting cycle is a step-by-step process of recording, classification and summarization of economic transactions of a business. It generates useful financial information in the form of financial statements including income statement, balance sheet, cash flow statement and statement of changes in equity.

The time period principle requires that a business should prepare its financial statements on periodic basis. Therefore accounting cycle is followed once during each accounting period. Accounting Cycle starts from the recording of individual transactions and ends on the preparation of financial statements and closing entries.

The accounting cycle is the various steps or stages of work or activity that we go through each year in accounting.

The cycle is depicted diagrammatically below:



The cycle above is a cycle of action we go through when accounting for any business.

7.1 Steps in the Accounting Cycle

1. Source Documents

Source documents are documents, such as cash slips, invoices, etc. that form the source of, and serve as proof for, a transaction.
In other words, they are the first documents that exist relating to a transaction.
Bookkeepers and accountants need to keep source documents for each transaction.

2. Journals

Journal entries are that first basic entry of debit and credit for each transaction, chronological (date-order) records of transactions entered into by a business.

		DEBIT	CREDIT
Dr	Baking equipment	$12,000	
Cr	Bank		$12,000

In the examples we have been doing in previous chapters, where we debited one account and credited another, we have been doing journal entries.

Journals also refer to the books of first entry, such as the cash receipts journal, the general journal and more.

3. Ledger (T-Accounts)

The ledger is a grouping of the accounts of a business.
The accounts are in the shape of a "T" and thus are often referred to as T-accounts.

Dr		Bank			Cr
2012		$	2012		$
Apr 1	Capital	15,000	Apr 9	Baking equipment	12,000
Apr 7	Loan	5,000			

In this step we take all the journal entries (debits and credits) relating to one account (in this example, bank) and draw up an account with all the transactions relating to it.

4. The Trial Balance

The trial balance is a sheet or report displaying all the accounts of a business, drawn up as a trial (test) of whether the total of all the debit balances equal the total of all the credit balances.
(A balance is the amount of an item at a point in time. For example, The balance in the bank account on the 1st of January was $5,000.)
The trial balance is prepared as a final check before drawing up the financial statements. When

errors are shown up in the trial balance, we make corrections through adjusting entries.

5. Financial Statements

The financial statements are the key reports of a business.
As mentioned, they are prepared from the information in the trial balance above.
The purpose of the financial statements is to show the reader the financial position, financial performance and cash flows of a business.
Financial statements are usually prepared once a year, and consist of an income statement, statement of changes in owners equity, balance sheet, cash flow statement and where needed, an auditor's report.

Closing Entries

There is a final step in the accounting cycle not shown above, which is the closing off of accounts (or closing entries), which are done at the end of each year along with the production of the financial statements.
This involves closing out temporary accounts (incomes and expenses), and transferring their balances through a profit account into the owners equity (reserves).

8. BASIC ACCOUNTING CONCEPTS

Accounting has been evolved over a period of several centuries. During this period, certain rules and conventions have been adopted. They serve as guidelines in identifying the events and transactions to be accounted for measuring, recording, summarizing and reporting them to the interested parties. These rules and conventions are termed as **Generally Accepted Accounting Principles.** These principles are also referred as standards, assumptions, concepts, conventions doctrines, etc. Thus, the accounting concepts are the fundamental ideas or basic assumptions underlying the theory and practice of financial accounting. They are the broad working rules for all accounting activities developed and accepted by the accounting profession.

Basic accounting concepts may be classified into two broad categories.

1. Concept to be observed at the time of recording transactions.(Recording Stage).
2. Concept to be observed at the time of preparing the financial accounts (Reporting Stage)

8.1 Accounting Concepts

1. **Business entity concept:** A business and its owner should be treated separately as far as their financial transactions are concerned.
2. **Money measurement concept:** Only business transactions that can be expressed in terms of money are recorded in accounting, though records of other types of transactions may be kept separately.
3. **Dual aspect concept:** For every credit, a corresponding debit is made. The recording of a transaction is complete only with this dual aspect.
4. **Going concern concept:** In accounting, a business is expected to continue for a fairly long time and carry out its commitments and obligations. This assumes that the business will not be forced to stop functioning and liquidate its assets at "fire-sale" prices.
5. **Cost concept:** The fixed assets of a business are recorded on the basis of their original cost in the first year of accounting. Subsequently, these assets are recorded minus depreciation. No rise or fall in market price is taken into account. The concept applies only to fixed assets.
6. **Accounting year concept:** Each business chooses a specific time period to complete a cycle of the accounting process–for example, monthly, quarterly, or annually–as per a fiscal or a

calendar year.

7. Matching concept: This principle dictates that for every entry of revenue recorded in a given accounting period, an equal expense entry has to be recorded for correctly calculating profit or loss in a given period.
8. Realisation concept: According to this concept, profit is recognised only when it is earned. An advance or fee paid is not considered a profit until the goods or services have been delivered to the buyer.

8.2 Accounting Conventions

There are four main conventions in practice in accounting: conservatism; consistency; full disclosure; and materiality.

1. Conservatism is the convention by which, when two values of a transaction are available, the lower-value transaction is recorded. By this convention, profit should never be overestimated, and there should always be a provision for losses.
2. Consistency prescribes the use of the same accounting principles from one period of an accounting cycle to the next, so that the same standards are applied to calculate profit and loss.
3. Materiality means that all material facts should be recorded in accounting. Accountants should record important data and leave out insignificant information.
4. Full disclosure entails the revelation of all information, both favourable and detrimental to a business enterprise, and which are of material value to creditors and debtors.

8.3 Classification of Business Transactions:

All business transactions are classified into three categories:

1. Those relating to persons
2. Those relating to property (Assets)
3. Those relating to income & expenses

Thus, three classes of accounts are maintained for recording all business transactions. They are:

1. Personal accounts
2. Real accounts
3. Nominal accounts

1. Personal Accounts: Accounts which are transactions with persons are called "Personal Accounts" . A separate account is kept on the name of each person for recording the benefits received from, or given to the person in the course of dealings with him.
E.g.: Krishna's A/C, Gopal's A/C, SBI A/C, Nagarjuna Finance Ltd.A/C, ObulReddy & Sons A/C, HMT Ltd. A/C, Capital A/C, Drawings A/C etc.

2. Real Accounts: The accounts relating to properties or assets are known as "Real Accounts" .Every business needs assets such as machinery, furniture etc, for running its activities .A separate account is maintained for each asset owned by the business.
E.g.: cash A/C, furniture A/C, building A/C, machinery A/C etc.

3. NominalAccounts: Accounts relating to expenses, losses, incomes and gains are known as "Nominal Accounts". A separate account is maintained for each item of expenses, losses, income or gain.
E.g.: Salaries A/C, stationery A/C, wages A/C, postage A/C, commission A/C, interest A/C, purchases A/C, rent A/C, discount A/C, commission received A/C, interest received A/C, rent

received A/C, discount received A/C.

Before recording a transaction, it is necessary to find out which of the accounts is to be debited and which is to be credited. The following three different rules have been laid down for the three classes of accounts....

1.*Personal Accounts*: The account of the person receiving benefit (receiver) is to be debited and the account of the person giving the benefit (given) is to be credited.

> ***Rule***: "Debit—The Receiver
> Credit–The Giver"

2.*Real Accounts*: When an asset is coming into the business, account of that asset is to be debited .When an asset is going out of the business, the account of that asset is to be credited.

> ***Rule***: "Debit—What comes in
> Credit–What goes out"

3. *Nominal Accounts*: When an expense is incurred or loss encountered, the account representing the expense or loss is to be debited . When any income is earned or gain made, the account representing the income of gain is to be credited.

> ***Rule***: "Debit—All expenses and losses
> Credit–All incomes and gains"

9. JOURNAL

The first step in accounting therefore is the record of all the transactions in the books of original entry viz., Journal and then posting into ledges.

JOURNAL: The word Journal is derived from the Latin word 'journ' which means a day. Therefore, journal means a 'day Book' in day-to-day business transactions are recorded in chronological order.

Journal is treated as the book of original entry or first entry or prime entry. All the business transactions are recorded in this book before they are posted in the ledges. The journal is a complete and chronological (in order of dates) record of business transactions. It is recorded in a systematic manner. The process of recording a transaction in the journal is called "JOURNALISING". The entries made in the book are called "Journal Entries".

The proforma of Journal is given below.

Date	Particulars	L.F. no	Debit RS.	Credit RS.

1998 Jan 1	Purchases account to cash account(being goods purchased for cash)		10,000/-	10,000/-

10. LEDGER

All the transactions in a journal are recorded in a chronological order. After a certain period, if we want to know whether a particular account is showing a debit or credit balance it becomes very difficult. So, the ledger is designed to accommodate the various accounts maintained the trader. It contains the final or permanent record of all the transactions in duly classified form. "A ledger is a book which contains various accounts." The process of transferring entries from journal to ledger is called "POSTING".

Posting is the process of entering in the ledger the entries given in the journal. Posting into ledger is done periodically, may be weekly or fortnightly as per the convenience of the business. The following are the guidelines for posting transactions in the ledger.

1. *After the completion of Journal entries only posting is to be made in the ledger.*
2. For each item in the Journal a separate account is to be opened. Further, for each new item a new account is to be opened.
3. Depending upon the number of transactions space for each account is to be determined in the ledger.
4. For each account there must be a name. This should be written in the top of the table. At the end of the name, the word "Account" is to be added.
5. The debit side of the Journal entry is to be posted on the debit side of the account, by starting with "TO".
6. The credit side of the Journal entry is to be posted on the debit side of the account, by starting with "BY".

Proforma for Ledger

Particulars account

Date	Particulars	Lfno	Amount	Date	Particulars	Lfno	amount

sales account

Date	Particulars	Lfno	Amount	Date	Particulars	Lfno	amount

cash account

Date	Particulars	Lfno	Amount	Date	Particulars	Lfno	amount

Balancing off a ledger account

Once the transactions for a period have been recorded, it will be necessary to find the balance on the ledger account:

(1)Total both sides of the T account and find the larger total.

(2)Put the larger total in the total box on the debit and credit side.

(3)Insert a balancing figure to the side of the T account which does not currently add up to the amount in the total box. Call this balancing figure 'balance c/f' (carried forward) or 'balance c/d' (carried down).

(4)Carry the balance down diagonally and call it 'balance b/f' (brought forward) or 'balance b/d' (brought down).

11. TRAIL BALANCE

The first step in the preparation of final accounts is the preparation of trail balance. In the double entry system of book keeping, there will be credit for every debit and there will not be any debit without credit. When this principle is followed in writing journal entries, the total amount of all debits is equal to the total amount all credits.

A trail balance is a statement of debit and credit balances. It is prepared on a particular date with the object of checking the accuracy of the books of accounts. It indicates that all the transactions for a particular period have been duly entered in the book, properly posted and balanced. The trail balance doesn't include stock in hand at the end of the period. All adjustments required to be done at the end of the period including closing stock are generally given under the trail balance.

DEFINITIONS: A trail balance is a list of all the balances standing on the ledger accounts and cash book of a concern at any given date.

-SPICER AND POGLAR

A trail balance is a statement of debit and credit balances extracted from the ledger with a view to test the arithmetical accuracy of the books.

-J.R.BATLIBOI:

Thus a trail balance is a list of balances of the ledger accounts' and cash book of a business concern at any given date.

PROFORMA FOR TRAIL BALANCE:

Trail balance for MR..... as on .....

NO	NAME OF ACCOUNT (PARTICULARS)	DEBIT AMOUNT(RS.)	CREDIT AMOUNT(RS.)

.

12. CASH BOOK

Cash is a current asset which consists of items used in day to day financial transactions as medium of exchange. In accounting and finance, cash includes, currency notes made of paper, coins,

demand deposits, money orders, checks and bank overdrafts etc.

The **cash book** is used to record receipts and payments of cash. It works as a book of original entry as well as a ledger account. The entries related to receipt and payment of cash are first recorded in the cash book and then posted to the relevant ledger accounts. Moreover, a cash book is a substitute for cash account in the ledger. A company that properly maintains a cash book does not need to open a cash account in its ledger.

12.1 Types of cash book

There are four major types of cash book that companies usually maintain to account for their cash flows. These are given below:

1. A single column cash book to record only cash transactions.
2. A double/two column cash book to record cash as well as bank transactions.
3. A triple/three column cash book to record cash, bank and purchase discount and sales discount.
4. A petty cash book to record small day to day cash expenditures.

1. Single column cash book

The single column cash book (also known as simple cash book) is a cash book that is used to record only cash transactions of a business. It is very identical to a traditional cash account in which all cash receipts are recorded on left hand (debit) side and all cash payments are recorded on right hand (credit) side in a chronological order.

The single column cash book has only one money column on both debit and credit sides titled as "amount" which is periodically totaled and balanced like a T-account. As stated earlier, a single column cash book records only cash related transactions. The entries relating to checks issued, checks received, purchases discount, and sales discount are not recorded in single column cash book.

Format:

The specimen/format of a single column cash book is given below:

Page No: 36

Dr. (Receipts) **CASH BOOK** **Cr. (Payments)**

Date	Description	VN	PR	Amount	Date	Description	VN	PR	Amount
2016					2016				

The purpose of five columns used on both sides of a single column cash book is briefly explained below:

- Date: The date column of the cash book is used to record the year, month and actual date of each cash transaction. This column ensures the chronological record of each business transaction involving receipt or payment of cash.
- Description: The description column is used to record the account titles to be debited or credited as a result of each cash transaction. A short explanation (also known as narration) of each cash transaction may also be written in this column. This column is sometime titled as "particulars".
- Voucher No: Voucher is a document that supports a business transaction. This column is used to record the serial number of a receipt voucher or payment voucher.
- Posting reference: This column is used to write the page number of each ledger account named in the description column of the cash book.
- Amount: The amount column of single column cash book is used to record the money value of each cash transaction.

Balancing a single column cash book

The single column cash book has only one money column which is totalled and balanced like a traditional T-account. At the end of each month or another appropriate period, the amount columns

of both sides are totalled. The difference between totals is written on the lighter side below all other entries. This difference is the closing cash balance for the current period and is usually termed as balance carried down (balance c/d). In next period, it becomes the opening cash balance and is usually termed as balance brought down (balance b/d).

Note: The debit side (receipt side) of a single column cash book is always heavier than the credit side (payment side) because we cannot pay more cash than we receive during a period.

Posting entries from single column cash book to ledger accounts

All entries in the cash book are periodically posted to appropriate accounts in general ledger and relevant subsidiary ledgers. The posting procedure is given below:

1. The balance b/d and balance c/d (i.e., opening and closing balances) of the cash book are not posted.
2. The entries on the debit side (or receipt side) of the cash book are posted to the credit side of relevant accounts in the ledger.
3. The entries on the credit side (or payment side) of the cash book are posted to the debit side of relevant accounts in the ledger.
4. The page numbers of the ledger accounts (i.e., account numbers) to which the entries have been posted are written in the posting reference column of the single column cash book. It makes easy to locate an account in the ledger to which an entry has been posted.

2. Double column cash book

The double column cash book (also known as two column cash book) has two money `columns on both debit and credit sides – one to record cash transactions and one to record bank transactions. In other words, we can say that if we add a bank column to both sides of a single column cash book, it would become a double column cash book. The cash column is used to record all cash transactions and works as a cash account whereas bank column is used to record all receipts and payments made by checks and works as a bank account. Both the columns are totaled and balanced like a traditional T-account at the end of an appropriate period which is usually one month.

Since a double column cash book provides cash as well as bank balance at the end of a period, some organizations prefer to maintain a double column cash book rather than maintaining two separate ledger accounts for recording cash and bank transactions.

Format

The format/specimen of a double column cash book is given below:

Page No___

Dr. (Receipts) **CASH BOOK** **Cr. (Payments)**

Date	Description	VN	PR	Cash	Bank	Date	Description	VN	PR	Cash	Bank

The above format of double column cash book has six columns on both debit and credit sides. The purpose of cash and bank columns has been explained at the start of this article and the purpose of date, description, voucher number (VN) and posting reference (PR) columns has been explained in single column cash book article.

Recording cash transactions:

1. All cash receipts are recorded in cash column on the debit side and all cash payments are recorded in cash column on credit side of the double column cash book.
2. If cash is received from a debtor or customer and is deposited into the bank account on the same date, the entry will be made in the bank column on the debit side, not in the cash column.

Recording bank transactions:

1. When a check is received and the same is deposited into the bank account on the same date, the amount of the check is entered in the bank column on the debit side.
2. When a check is received and the same is not deposited into the bank on the same date, the amount of the check is entered in the cash column, not in the bank column.
3. When a check received from a receivable on a date subsequent to its receipt is deposited into the bank account, the entry is made in the bank column on the debit side and in the cash column on credit side. It is called a *contra entry*.
4. When a check is issued, the amount of the check is entered in the bank column on the credit side.

Recording contra entries:

The "contra" is a Latin word which means against or opposite. The contra entry is an entry which involves a cash account and a bank account and which is recorded on both debit and credit sides of the double column cash book at the same time. This entry is not posted to any ledger account because both debit and credit aspects of transaction are handled within the cash book and the double entry work is completed. In posting reference column, the letter "C" is written to denote that the entry is a contra entry and will not be posted to any ledger account. A contra entry is made in the following circumstances:

(1). When cash is deposited into the bank account:

The entry for depositing cash into the bank account is:

Bank [Dr]

Cash [Cr]

The deposited amount is written in the bank column on debit side and cash column on credit side.

(2). When cash is withdrawn from bank account for business use:

The entry for withdrawal of cash from bank account for business purpose is:

Cash [Dr]

Bank [Cr]

The withdrawn amount is written in the cash column on debit side and bank column on credit side.

Important: The contra entry is made only when the cash is withdrawn for business use. If cash is withdrawn for personal use, it will be recorded only in the bank column on credit side of the cash book.

(3). When a check received from a receivable or customer on a date subsequent to its receipt is deposited into the bank account:

When a check is received and is not deposited into the bank account on the same date, it is recorded in the cash book just like a normal cash receipt. On a subsequent date, when the check is deposited into the bank account, the following entry is made:

Bank [Dr]

Cash [Cr]

The amount of the check is recorded in the bank column on debit side and cash column on credit side.

Balancing and posting a double column cash book

Both cash column and bank column of double column cash book are totaled and balanced at the end of an appropriate period. The process of balancing and posting a cash book has been explained in detail in single column cash book article. The same process is also applicable to a double column cash book.

3. Triple/three column cash book

The triple column cash book (also referred to as three column cash book) is the most exhaustive form of cash book which has three money columns on both receipt (Dr) and payment (Cr) sides to record transactions involving cash, bank and discounts. A triple column cash book is usually maintained by large firms which make and receive payments in cash as well as by bank and

which frequently receive and allow cash discounts.

The procedure of recording transactions in a triple/three column cash book is similar to that of a double column cash book. The only difference between two types of cash book is that a double column cash book has two money columns (i.e., cash and bank) whereas a triple column cash book has three money columns (i.e., cash, bank and discount).

The cash and bank columns of triple column cash book are used as accounts and are periodically totaled and balanced just like in case of a double column cash book. The discount column is only totaled. It is not balanced because it does not work as an account.

In general ledger, two separate accounts are maintained for discount allowed and discount received. The total of discount column on debit side of cash book represents the total cash discount allowed to customers during the period and is posted to the discount allowed account maintained in the ledger. The total of discount column on credit side represents the total cash discount received from suppliers during the period and is posted to the discount received account maintained in the ledger.

Discount allowed is an expense and discount received is an income of the business.

Format

The format of a triple/three column cash book is given below:

Page No:___

Dr. (Receipts) **CASH BOOK** **Cr. (Payments)**

Date	Description	VN	PR	Disc	Cash	Bank	Date	Description	VN	PR	Disc	Cash	Bank

The triple column cash book has 7 columns on both debit and credit sides. The purpose of each column is briefly explained below:

1. Date: The date column is used to enter the transaction date.
2. Description: The description column is used to write the name of the account to be debited or credited in the ledger as a result of cash or bank transaction.
3. Voucher number (VN): A voucher is a document in support of a transaction. The serial number of the voucher is entered in this column.
4. Posting reference (PR): Each account in the ledger is assigned a unique numbered. The number each ledger account that is written in description column is entered in PR column.
5. Discount: The amount of discount allowed is recorded on debit side and the amount of discount received is recorded on credit side in discount column.The totals of debit column and credit column are posted to discount allowed account and discount received account respectively.
6. Cash: The amount of cash received (net of any discount allowed) is entered on the debit side and the amount of cash paid (net of any discount received) is entered on the credit side in cash column. This column is totaled and balanced like a ledger account.
7. Bank: The amount of all receipts and payments made by the bank account are entered in bank column of the cash book. This column is also totaled and balanced like a ledger account.

Posting a three column cash book to ledger accounts

As explained earlier in this article, only cash and bank columns of triple column cash book work as accounts and are therefore balanced. The discount columns on both receipt and payment sides are only totaled and not balanced.

The procedure of posting entries from a cash book to ledger accounts has been explained in single

column cash book article. The same procedure is followed for posting entries from double as well as triple column cash book to ledger accounts.

4. Petty cash book

Besides maintaining a main or general cash book, many companies also maintain a small cash book known as petty cash book to record small day to day expenditures of the business.

Petty cash book is a type of cash book that is used to record minor regular expenditures such as office teas, bus fares, fuel, newspapers, cleaning, pins, and causal labor etc. These small expenditures are usually paid using coins and currency notes rather than checks. The person responsible for spending petty cash and recording it in a petty cash book is known as *petty cashier*.

The chief cashier (also known as head or main cashier) bears the heavy responsibility of maintaining company's general cash book in which receipts and payments amounting to hundreds or even thousands of dollars are recorded by him every day. He, therefore, usually delegates the responsibility for handling small day to day cash transactions to a bookkeeper, receptionist or some other reliable staff member. Like a general cash book, a petty cash book has a debit and a credit side. All receipts are recorded on the debit side and all payments are recorded on the credit side of petty cash book by the petty cashier.

Petty cash systems

The cash allocated for petty expenditures for a specific period is entered on the credit side of general cash book and on the debit side of petty cash book.

The cash is given to the petty cashier either on ordinary system or imprest system which are briefly explained below:

1. Ordinary system

Under ordinary system, a lump sum amount of cash is given to the petty cashier. When the whole amount is spent, the petty cashier submits the details of petty expenditures recorded in the petty cash book to the head or chief cashier for review.

2. Imprest system

Under imprest system, a fixed amount of money known as *float* is given to the petty cashier to meet petty expenditures for an agreed period which usually consists of a week or month. At the end of agreed period, the petty cashier submits the details of all expenditures incurred by him to the chief cashier. The total cash spent by the petty cashier during the period is reimbursed to him and the total cash available to spend at the start of the next period becomes equal to the original sum (i.e., float). At any time, the total of *petty cash balance* and *all expenditures that have not been reimbursed* to the petty cashier is equal to the agreed float.

Format of petty cash book

A simple format of petty cash book is given below:

-COMPANY-

Dr. PETTY CASH BOOK Cr.

Receipt	Date	Details	VN	Total	expense 1	Expense 2	Expense 3	Expense 4

13.BANK RECONCILIATION STATEMENT

Bank reconciliation statement is a report which compares the bank balance as per company's accounting records with the balance stated in the bank statement.

It is normal for a company's bank balance as per accounting records to differ from the balance as per bank statement due to timing differences. Certain transactions are recorded by the entity that is updated in the bank's system after a certain time lag. Likewise, some transactions are accounted for in the bank's financial system before the company incorporates them into its own accounting system. Such timing differences appear as reconciling items in the Bank Reconciliation Statement.

The purpose of preparing a Bank Reconciliation Statement is to detect any discrepancies between the accounting records of the entity and the bank besides those due to normal timing differences. Such discrepancies might exist due to an error on the part of the company or the bank.

Importance of Bank Reconciliation

- Preparation of bank reconciliation helps in the identification of errors in the accounting records of the company or the bank.
- Cash is the most vulnerable asset of an entity. Bank reconciliations provide the necessary control mechanism to help protect the valuable resource through uncovering irregularities such as unauthorized bank withdrawals. However, in order for the control process to work effectively, it is necessary to segregate the duties of persons responsible for accounting and authorizing of bank transactions and those responsible for preparing and monitoring bank reconciliation statements.
- If the bank balance appearing in the accounting records can be confirmed to be correct by comparing it with the bank statement balance, it provides added comfort that the bank transactions have been recorded correctly in the company records.
- Monthly preparation of bank reconciliation assists in the regular monitoring of cash flows of a business.

Bank Reconciliation Procedure:

1. On the bank statement, compare the company's list of issued checks and deposits to the checks shown on the statement to identify uncleared checks and deposits in transit.
2. Using the cash balance shown on the bank statement, add back any deposits in transit.
3. Deduct any outstanding checks.
4. This will provide the adjusted bank cash balance.
5. Next, use the company's ending cash balance, add any interest earned and notes receivable amount.
6. Deduct any bank service fees, penalties, and NSF checks. This will arrive at the adjusted company cash balance.
7. After reconciliation, the adjusted bank balance should match with the company's ending adjusted cash balance.

Rules, Format and Procedure:

Following are the *rules and format for preparing a bank reconciliation statement:*

	Adusted Cash Book		Bank Reconciliation Statement	
Items	Debit Balance as per Adjusted Cash Book	Credit Balance as per Adjusted Cash Book	Debit Balalce as per Bank Statement	Credit Balance as per Bank Statement
Direct Deposits	Debit	-	-	-
Direct Payments	-	Credit	-	-
Un-credited Cheques	Subtract	Add	Subtract	Add
Un-presented Cheques	Add	Subtract	Add	Subtract

UNIT-II
FINAL ACCOUNTS

In every business, the business man is interested in knowing whether the business has resulted in profit or loss and what the financial position of the business is at a given time. In brief, he wants to know (i)The profitability of the business and (ii) The soundness of the business.

The trader can ascertain this by preparing the final accounts. The final accounts are prepared from the trial balance. Hence the trial balance is said to be the link between the ledger accounts and the final accounts. The final accounts of a firm can be divided into two stages. The first stage is preparing the trading and profit and loss account and the second stage is preparing the balance sheet.

TRADING ACCOUNT

The first step in the preparation of final account is the preparation of trading account. The main purpose of preparing the trading account is to ascertain gross profit or gross loss as a result of buying and selling the goods.

Trading Account

Trading account is prepared for calculating the gross profit or gross loss arising or incurred as a result of the trading activities of a business. In other worlds, it is prepared to show the result of manufacturing, buying and selling of goods. If the amount of sales exceeds the amount of purchases and the expenses directly connected with such purchases, the difference is termed as gross profit. On the contrary, if the purchases, and direct expenses exceed the sales, the difference is called gross loss. A Trading Account records the amount of purchases of goods and also the expenses which are incurred in bringing that commodity to a saleable state. IN other words, all expenses which relate to either purchase of raw material for manufacturing of goods are recorded in the Trading Account. All such expenses are called 'Direct Expenses'.

According to J.R. Batliboi, "The Trading Account shows the results of buying and selling of goods. In preparing this account, the general establishment charges are ignored and only the transactions in goods are included."

Sometimes, a Trading Account is also called 'Good A/c' because all the transaction relating to goods are recorded in it. Such as (i) Opening Stock, (ii) Purchases, (iii) Purchases Returns, (iv) Sales, (v) Sales Returns, (vi) Closing Stock, (vii) Expenses incurred on manufacturing of goods, and (viii) Expenses incurred on purchasing and bringing the goods to the trading place. All such expenses are summarised and recorded in the Trading Account at the end of the year.

Need and Importance of Trading Account

Preparation of Trading Account serves the following objectives:

1. It provides information about Gross Profit and Gross Loss: It informs of the gross profit or gross loss as a result of buying and selling the goods during the year. The percentage of Current Year's gross profit on the amount of sales can be calculated and compared with those of the previous years. Thus, it provides data for comparison, analysis and planning for a future period.

2. It provides information about the direct expenses: All the expenses incurred on the purchase and manufacturing of goods are recorded in the trading account in a summarised form. Percentage of such expenses on sales can be calculated and compared with those of the previous years. In this way it enables the management to control and rationalise the expenses.

3. Comparison of closing stock with those of the previous years: closing stock has to be valued and recorded in a trading account. This stock can be compared with the closing stock of the previous years and if the stock shows an increasing trend, the reasons may be inquired into.

4. It provides safety against possible losses: If the ratio of gross profit has decreased in comparison to the preceding year, the businessman can take effective measures to safeguard himself against future losses. For example, he may increase the sale price of his gods or may proceed to analyse and control the direct expenses.

Preparation of Trading Account

Trading Account is a Nominal Account and all expenses which relate to either purchase or manufacturing of goods are written on the Dr. side of the Trading Account.

Item written on the Dr. side of the Trading Account:

1. Opening Stock: The stock of goods remaining unsold at the end of the previous year is termed as the opening stock of the current year. In other words, the closing stock of the last year becomes the opening stock of the current year. Opening Stock will include the following:

I. Opening Stock of Raw Material.

II. Opening Stock of Semi-finished goods, and

III. Opening Stock of Finished goods.

2. Purchases and Purchases Returns: Goods which have been bought for resale are termed as Purchases and goods which are returned to suppliers are termed as purchase returns or returns outwards. Purchase Account will be given on the debit side of the trial balance and Purchase Return Account on the credit side of the trial balance. Purchase returns will be shown as a deduction from Purchases on the debit side of the trading account. Purchases include cash as well as credit purchases.

3. Direct Expenses: All expenses incurred in purchasing the goods, brining them to the go down and manufactures of goods are called direct expenses. Direct expenses include the following:

I. Wages: Wages are paid to workers who are directly engaged in the loading, unloading and production of goods and as such are debited to the trading account. It should be noted that:

(i) If the item 'Wages and Salaries' is given in the question it will be shown on the trading account. On the contrary, if 'Salaries and Wages' is given it will be shown on the profit & loss account.

(ii) If wages are paid for bringing a new machine or for its installation it will be added to the cost of the machine and hence will not be shown in the trading account.

II. Carriage or Carriage Inwards or Freight: These expenses should be debited to trading account because these are generally paid for bringing the goods to the factory or place of business. However, if any carriage or freight is paid on bringing an asset, the amount should be added to the asset account and must not be debited to trading account.

III. Manufacturing Expenses: All expenses incurred in the manufacture of goods are shown on the debit side of the trading account such as Coal, Gas, Fuel, Water, Power, Factory Rent, Factory Lighting etc.

IV. Dock Charges: These are the charges levied on ships and their cargo while entering or leaving docks. If dock charges are paid on import of goods they are shown on the debit side of trading account. In the absence of specific instructions, these are debited to trading account.

V. Import Duty or Custom Duty: Custom Duty is paid on import as well as on export of goods. Custom duty when paid on the purchase of goods is charged to trading account. In the absence of specific instructions, these are debited to trading account.

VI. Octroi: This is levied by the Municipal Committee when the goods enter the city and hence debited to trading account.

VII.Royalty: This is the amount paid to the owner of a mine or patent for using his right or patent. Royalty is usually charged to trading account because it increases the cost of production. However, if it is specifically stated in the question that the Royalty is based on sales, it will be charged to Profit and Loss account.

Items written on the Cr. Side of the Trading Account:

1. ales and Sales Returns: Both Cash and Credit sales will be included in sales. The sales account will be a credit balance whereas, the sales return account or returns inwards account will be a debit balance. Sales return will be deducted out of Sales on the credit side of the trading account.

2. Closing Stock: The goods remaining unsold at the end of the year is known as Closing Stock. It is valued at cost price or market price whichever is less. It includes the closing stock of raw material, Closing Stock of semi-finished goods and Closing Stock of finished goods.

Normally, the Closing Stock is given outside the Trail Balance. This is so because its valuation is made after the accounts have been closed. It is incorporated in the books by means of

the following entry:

Closing Stock A/c Dr.

To Trading A/c

(Closing Stock transferred to Trading A/c)

When the above entry is passed, the Closing Stock Account is opened. On the one hand, it will be posted to the credit side of the trading account and on the other hand, will be shown on the Assets side of the Balance Sheet, in order to complete the double entry. Sometimes, the Closing Stock is given inside the Trail Balance. This mean that the entry to incorporate the closing stock in the books has already been passed. It would imply that the Closing Stock must have been deducted out of Purchases Account. Hence, in such a case, Closing Stock will not be shown in the Trading Account but will appear on the Assets side of the Balance Sheet only.

Trading account of MR..... for the year ended .....

Particulars	Amount	Particulars	Amount
To opening stock	Xxxx	By sales xxxx	
To purchases xxxx		Less: returns xxx	Xxxx
Less: returns xx	Xxxx	By closing stock	Xxxx
To carriage inwards	Xxxx		
To wages	Xxxx		
To freight	Xxxx		
To customs duty, octroi	Xxxx		
To gas, fuel, coal, Water	Xxxx		
To factory expenses			
To other man. Expenses	Xxxx		
To productive expenses	Xxxx		
To gross profit c/d	Xxxx		
	Xxxx		Xxxx
	Xxxx		

Finally, a ledger may be defined as a summary statement of all the transactions relating to a person , asset, expense or income which have taken place during a given period of time. The up-to-date state

of any account can be easily known by referring to the ledger.

PROFIT AND LOSS ACCOUNT

The business man is always interested in knowing his net income or net profit.Net profit represents the excess of gross profit plus the other revenue incomes over administrative, sales, Financial and other expenses. The debit side of profit and loss account shows the expenses and the credit side the incomes. If the total of the credit side is more, it will be the net profit. And if the debit side is more, it will be net loss.

PROFIT AND LOSS A/C OF MR.....FOR THE YEAR ENDED.....

PARTICULARS	AMOUNT	PARTICULARS	AMOUNT
TO office salaries	Xxxxxx	By gross profit b/d	Xxxxx
TO rent,rates,taxes	Xxxxx	Interest received	Xxxxx
TO Printing and stationery	Xxxxx	Discount received	Xxxx
TO Legal charges		Commission received	Xxxxx
Audit fee	Xxxx	Income from investments	
TO Insurance	Xxxx	Dividend on shares	
TO General expenses	Xxxx	Miscellaneous	Xxxx
TO Advertisements	Xxxxx	investments	Xxxx
TO Bad debts	Xxxx	Rent received	
TO Carriage outwards	Xxxx		xxxx
TO Repairs	Xxxx		
TO Depreciation	Xxxxx		
TO interest paid	Xxxxx		
TO Interest on capital	Xxxxx		
TO Interest on loans	Xxxx		
TO Discount allowed	Xxxxx		
TO Commission	Xxxxx		
TO Net profit——→	Xxxxx		
(transferred to capital a/c)			
	Xxxxxx		Xxxxxx

BALANCE SHEET

The second point of final accounts is the preparation of balance sheet. It is prepared often in the trading and profit, loss accounts have been compiled and closed. A balance sheet may be considered as a statement of the financial position of the concern at a given date.

DEFINITION: A balance sheet is an item wise list of assets, liabilities and proprietorship of a business at a certain state.

J.R.botliboi: A balance sheet is a statement with a view to measure exact financial position of a business at a particular date.

Thus, Balance sheet is defined as a statement which sets out the assets and liabilities of a business firm and which serves to as certain the financial position of the same on any particular date. On the left-hand side of this statement, the liabilities and the capital are shown. On the right-hand side all the

assets are shown. Therefore, the two sides of the balance sheet should be equal. Otherwise, there is an error somewhere.

BALANCE SHEET OF ..... AS ON .....

Liabilities and capital	Amount	Assets	Amount
Creditors	Xxxx	Cash in hand	Xxxx
Bills payable	Xxxx	Cash at bank	Xxxx
Bank overdraft	Xxxx	Bills receivable	Xxxx
Loans	Xxxx	Debtors	Xxxx
Mortgage	Xxxx	Closing stock	Xxxx
Reserve fund	Xxxx	Investments	Xxxx
Capital xxxxxx		Furniture and fittings	Xxxx
Add:		Plats&machinery	
Net Profit xxxx		Land & buildings	Xxxx
——		Patents, tm ,copyrights	Xxxx
xxxxxxx		Goodwill	Xxxx
——		Prepaid expenses	
		Outstanding incomes	Xxxx
Less:			Xxxx
Drawings xxxx	Xxxx		Xxxx
——	XXXX		XXXX

Advantages: The following are the advantages of final balance .

1. It helps in checking the arithmetical accuracy of books of accounts.
2. It helps in the preparation of financial statements.
3. It helps in detecting errors.
4. It serves as an instrument for carrying out the job of rectification of entries.
5. It is possible to find out the balances of various accounts at one place.

FINAL ACCOUNTS – ADJUSTMENTS

We know that business is a going concern. It has to be carried on indefinitely. At the end of every accounting year. The trader prepares the trading and profit and loss account and balance sheet. While preparing these financial statements, sometimes the trader may come across certain problems .The expenses of the current year may be still payable or the expenses of the next year have been prepaid during the current year. In the same way, the income of the current year still receivable and the income of the next year have been received during the current year. Without these adjustments, the profit figures arrived at or the financial position of the concern may not be correct. As such these adjustments are to be made while preparing the final accounts.

The adjustments to be made to final accounts will be given under the Trial Balance. While making the adjustment in the final accounts, the student should remember that "every adjustment is to be made in the final accounts twice i.e. once in trading, profit and loss account and later in balance sheet generally". The following are some of the important adjustments to be made at the time of preparing of final accounts:-

1. CLOSING STOCK:-

(i)If closing stock is given in Trail Balance: It should be shown only in the balance sheet "Assets Side".

(ii)If closing stock is given as adjustment:

1. First, it should be posted at the credit side of "Trading Account".
2. Next, shown at the asset side of the "Balance Sheet".

2. OUTSTANDING EXPENSES:-

(i)If outstanding expenses given in Trail Balance: It should be only on the liability side of Balance Sheet.

(ii)If outstanding expenses given as adjustment:

1. First, it should be added to the concerned expense at the debit side of profit and loss account or Trading Account.
2. Next, it should be added at the liabilities side of the Balance Sheet.

3. PREAPID EXPENSES:-

(i)If prepaid expenses given in Trial Balance: It should be shown only in assets side of the Balance Sheet.
(ii)If prepaid expense given as adjustment :

1. First, it should be deducted from the concerned expenses at the debit side of profit and loss account or Trading Account.
2. Next, it should be shown at the assets side of the Balance Sheet.

4. INCOME EARNED BUT NOT RECEIVED [OR] OUTSTANDING INCOME [OR] ACCURED INCOME:-

(i)If incomes given in Trial Balance: It should be shown only on the assets side of the Balance Sheet.

(ii)If incomes outstanding given as adjustment:

1. First, it should be added to the concerned income at the credit side of profit and loss account.
2. Next, it should be shown at the assets side of the Balance sheet.

5. INCOME RECEIVED IN ADVANCE: UNEARNED INCOME:-
(i)If unearned incomes given in Trail Balance : It should be shown only on the liabilities side of the Balance Sheet.

(ii)If unearned income given as adjustment :

1. First, it should be deducted from the concerned income in the credit side of the profit and loss account.
2. Secondly, it should be shown in the liabilities side of the Balance Sheet.

6. DEPRECIATION:-

(i)If Depreciation given in Trail Balance: It should be shown only on the debit side of the profit and loss account.

(ii)If Depreciation given as adjustment

1. First, it should be shown on the debit side of the profit and loss account.
2. Secondly, it should be deduced from the concerned asset in the Balance sheet assets side.

7. INTEREST ON LOAN [OR] CAPITAL :-

(i)If interest on loan (or) capital given in Trail balance :It should be shown only on debit side of the profit and loss account.

(ii)If interest on loan (or)capital given as adjustment :

1. First, it should be shown on debit side of the profit and loss account.
2. Secondly, it should added to the loan or capital in the liabilities side of the Balance Sheet.

8. BAD DEBTS:-

(i)If bad debts given in Trail balance: It should be shown on the debit side of the profit and loss account.

(ii)If bad debts given as adjustment:

1. First, it should be shown on the debit side of the profit and loss account.
2. Secondly, it should be deducted from debtors in the assets side of the Balance Sheet.

9. INTEREST ON DRAWINGS:-

(i)If interest on drawings given in Trail balance: It should be shown on the credit side of the profit and loss account.

(ii)If interest on drawings given as adjustments :

1. First, it should be shown on the credit side of the profit and loss account.
2. Secondly, it should be deducted from capital on liabilities side of the Balance Sheet.

10. INTEREST ON INVESTMENTS:-

(i)If interest on the investments given in Trail balance :It should be shown on the credit side of the profit and loss account.

(ii)If interest on investments given as adjustments :

1. First, it should be shown on the credit side of the profit and loss account.
2. Secondly, it should be added to the investments on assets side of the Balance Sheet.

Financial system:-

The economic development of a nation is reflected by the progress of the various economic units, broadly classified into corporate sector, government and household sector. There are areas or people with surplus funds and there are those with a deficit. A financial system or financial sector functions as an intermediary and facilitates the flow of funds from the areas of surplus to the areas of deficit. A Financial System is a composition of various institutions, markets, regulations and laws, practices, money manager, analysts, transactions and claims and liabilities.

Financial system comprises of set of subsystems of financial institutions, financial markets, financial instruments and services which helps in the formation of capital. It provides a mechanism by which savings are transformed to investment.

A financial system functions as an intermediary between savers and investors. It facilitates the flow of funds from the areas of surplus to the areas of deficit. It is concerned about the money, credit and finance. These three parts are very closely interrelated with each other and depend on each other.

A financial system may be defined as a set of institutions, instruments and markets which promotes savings and channels them to their most efficient use. It consists of individuals (savers), intermediaries, markets and users of savings (investors).

In the worlds of Van Horne, *"financial system allocates savings efficiently in an economy to ultimate users either for investment in real assets or for consumption".*

According to Prasanna Chandra, *"financial system consists of a variety of institutions, markets and instruments related in a systematic manner and provide the principal means by which savings are transformed into investments".*

Thus financial system is a set of complex and closely interlinked financial institutions, financial markets, financial instruments and services which facilitate the transfer of funds. Financial institutions mobilise funds from suppliers and provide these funds to those who demand them. Similarly, the financial markets are also required for movement of funds from savers to intermediaries and from intermediaries to investors. In short, financial system is a mechanism by which savings are transformed into investments.

Functions of Financial System

The financial system of a country performs certain valuable functions for the economic growth of that country. The main functions of a financial system may be briefly discussed as below:

1. Saving function: An important function of a financial system is to mobilise savings and channelize them into productive activities. It is through financial system the savings are transformed into investments.
2. Liquidity function: The most important function of a financial system is to provide money and monetary assets for the production of goods and services. Monetary assets are those assets which can be converted into cash or money easily without loss of value. All activities in a financial system are related to liquidity-either provision of liquidity or trading in liquidity.
3. Payment function: The financial system offers a very convenient mode of payment for goods and services. The cheque system and credit card system are the easiest methods of payment in the economy. The cost and time of transactions are considerably reduced.
4. Risk function: The financial markets provide protection against life, health and income risks. These guarantees are accomplished through the sale of life, health insurance and property insurance policies.
5. Information function: A financial system makes available price-related information. This is a valuable help to those who need to take economic and financial decisions. Financial markets disseminate information for enabling participants to develop an informed opinion about investment, disinvestment, reinvestment or holding a particular asset.
6. Transfer function: A financial system provides a mechanism for the transfer of the resources across geographic boundaries.

7. **Reformatory functions:** A financial system undertaking the functions of developing, introducing innovative financial assets/instruments services and practices and restructuring the existing assts, services etc, to cater the emerging needs of borrowers and investors (financial engineering and re engineering).

8. Other functions: It assists in the selection of projects to be financed and also reviews performance of such projects periodically. It also promotes the process of capital formation by bringing together the supply of savings and the demand for investible funds.

Role and Importance of Financial System in Economic Development

1. It links the savers and investors. It helps in mobilizing and allocating the savings efficiently and effectively. It plays a crucial role in economic development through saving-investment process. This savings – investment process is called capital formation.
2. It helps to monitor corporate performance.
3. It provides a mechanism for managing uncertainty and controlling risk.
4. It provides a mechanism for the transfer of resources across geographical boundaries.
5. It offers portfolio adjustment facilities (provided by financial markets and financial intermediaries).
6. It helps in lowering the transaction costs and increase returns. This will motivate people to save more.
7. It promotes the process of capital formation.
8. It helps in promoting the process of financial deepening and broadening. Financial deepening means increasing financial assets as a percentage of GDP and financial broadening means building an increasing number and variety of participants and instruments. In short, a financial system contributes to the acceleration of economic development. It contributes to growth through technical progress.

Structure of Indian Financial System

Financial structure refers to shape, components and their order in the financial system. The Indian financial system can be broadly classified into formal (organised) financial system and the informal (unorganised) financialsystem. The formal financial system comprises of Ministry of Finance, RBI, SEBI and other regulatory bodies. The informal financial system consists of individual money lenders, groups of persons operating as funds or associations, partnership firms consisting of local brokers, pawn brokers, and non-banking financial intermediaries such as finance, investment and chit fund companies.

The formal financial system comprises financial institutions, financial markets, financial instruments and financial services. These constituents or components of Indian financial system may be briefly discussed as below:

I. Financial Institutions

Financial institutions are the participants in a financial market. They are business organizations dealing in financial resources. They collect resources by accepting deposits from individuals and institutions and lend them to trade, industry and others. They buy and sell financial instruments. They generate financial instruments as well. They deal in financial assets. They accept deposits, grant loans and invest in securities. Financial institutions are the business organizations that act as mobilises of savings and as purveyors of credit or finance. This means financial institutions mobilise the savings of savers and give credit or finance to the investors. They also provide various financial services to the community. They deal in financial assets such as deposits, loans, securities and so on.

On the basis of the nature of activities, financial institutions may be classified as: (a) Regulatory and promotional institutions, (b) Banking institutions, and (c) Non-banking institutions.

1. Regulatory and Promotional Institutions:

Financial institutions, financial markets, financial instruments and financial services are all regulated by regulators like Ministry of Finance, the Company Law Board, RBI, SEBI, IRDA, Dept. of Economic Affairs, Department of Company Affairs etc. The two major Regulatory and Promotional Institutions in India are Reserve Bank of India (RBI) and Securities Exchange Board of India (SEBI). Both RBI and

SEBI administer, legislate, supervise, monitor, control and discipline the entire financial system. RBI is the apex of all financial institutions in India. All financial institutions are under the control of RBI. The financial markets are under the control of SEBI. Both RBI and SEBI have laid down several policies, procedures and guidelines. These policies, procedures and guidelines are changed from time to time so as to set the financial system in the right direction.

2. Banking Institutions:

Banking institutions mobilise the savings of the people. They provide a mechanism for the smooth exchange of goods and services. They extend credit while lending money. They not only supply credit but also create credit. There are three basic categories of banking institutions. They are commercial banks, co-operative banks and developmental banks.

3. Non-banking Institutions:

The non-banking financial institutions also mobilize financial resources directly or indirectly from the people. They lend the financial resources mobilized. They lend funds but do not create credit. Companies like LIC, GIC, UTI, Development Financial Institutions, Organisation of Pension and Provident Funds etc. fall in this category. Non-banking financial institutions can be categorized as investment companies, housing companies, leasing companies, hire purchase companies, specialized financial institutions (EXIM Bank etc.) investment institutions, state level institutions etc. Financial institutions are financial intermediaries. They intermediate between savers and investors. They lend money. They also mobilise savings.

II. Financial Markets

Financial markets are another part or component of financial system. Efficient financial markets are essential for speedy economic development. The vibrant financial market enhances the efficiency of capital formation. It facilitates the flow of savings into investment. Financial markets bridge one set of financial intermediaries with another set of players. Financial markets are the backbone of the economy. This is because they provide monetary support for the growth of the economy. The growth of the financial markets is the barometer of the growth of a country's economy. Financial market deals in financial securities (or financial instruments) and financial services.Financial markets are the centres or arrangements that provide facilities for buying and selling of financial claims and services. These are the markets in which money as well as monetary claims is traded in. Financial markets exist wherever financial transactions take place. Financial transactions include issue of equity stock by a company, purchase of bonds in the secondary market, deposit of money in a bank account, transfer of funds from a current account to a savings account etc.

The participants in the financial markets are corporations, financial institutions, individuals and the government. These participants trade in financial products in these markets. They trade either directly or through brokers and dealers. In short, financial markets are markets that deal in financial assets and credit instruments.

Functions of Financial Markets:

The main functions of financial markets are outlined as below:

1. To facilitate creation and allocation of credit and liquidity.
2. To serve as intermediaries for mobilisation of savings.
3. To help in the process of balanced economic growth.
4. To provide financial convenience.
5. To provide information and facilitate transactions at low cost.
6. To cater to the various credits needs of the business organisations.

Classification of Financial Markets:

There are different ways of classifying financial markets. There are mainly five ways of classifying financial markets.

1. Classification on the basis of the type of financial claim: On this basis, financial markets may be classified into debt market and equity market.

Debt market: This is the financial market for fixed claims like debt instruments.

Equity market: This is the financial market for residual claims, i.e., equity instruments.
2. Classification on the basis of maturity of claims: On this basis, financial markets may be classified into money market and capital market.
Money market: A market where short term funds are borrowed and lend is called money market. It deals in short term monetary assets with a maturity period of one year or less. Liquid funds as well as highly liquid securities are traded in the money market. Examples of money market are Treasury bill market, call money market, commercial bill market etc. The main participants in this market are banks, financial institutions and government. In short, money market is a place where the demand for and supply of short term funds are met.
Capital market: Capital market is the market for long term funds. This market deals in the long term claims, securities and stocks with a maturity period of more than one year. It is the market from where productive capital is raised and made available for industrial purposes. The stock market, the government bond market and derivatives market are examples of capital market. In short, the capital market deals with long term debt and stock.
3. Classification on the basis of seasoning of claim: On this basis, financial markets are classified into primary market and secondary market.
Primary market: Primary markets are those markets which deal in the new securities. Therefore, they are also known as *new issue markets*. These are markets where securities are issued for the first time. In other words, these are the markets for the securities issued directly by the companies. The primary markets mobilise savings and supply fresh or additional capital to business units. In short, primary market is a market for raising fresh capital in the form of shares and debentures.
Secondary market: Secondary markets are those markets which deal in existing securities. Existing securities are those securities that have already been issued and are already outstanding. Secondary market consists of stock exchanges. Stock exchanges are self regulatory bodies under the overall regulatory purview of the Govt. /SEBI.
4. Classification on the basis of structure or arrangements: On this basis, financial markets can be classified into organised markets and unorganized markets.
Organised markets: These are financial markets in which financial transactions take place within the well established exchanges or in the systematic and orderly structure.
Unorganised markets: These are financial markets in which financial transactions take place outside the well established exchange or without systematic and orderly structure or arrangements.
5. Classification on the basis of timing of delivery: On this basis, financial markets may be classified into cash/spot market and forward / future market.
Cash / Spot market: This is the market where the buying and selling of commodities happens or stocks are sold for cash and delivered immediately after the purchase or sale of commodities or securities.
Forward/Future market: This is the market where participants buy and sell stocks/commodities, contracts and the delivery of commodities or securities occurs at a pre-determined time in future.
6. Other types of financial market: Apart from the above, there are some other types of financial markets. They are foreign exchange market and derivatives market.
Foreign exchange market: Foreign exchange market is simply defined as a market in which one country's currency is traded for another country's currency. It is a market for the purchase and sale of foreign currencies.
Derivatives market: The derivatives are most modern financial instruments in hedging risk. The individuals and firms who wish to avoid or reduce risk can deal with the others who are willing to accept the risk for a price. A common place where such transactions take place is called the derivative market. It is a market in which derivatives are traded. In short, it is a market for derivatives.
The important types of derivatives are forwards, futures, options, swaps, etc.

III. Financial Instruments (Securities)

Financial instruments are the financial assets, securities and claims. They may be viewed as financial

assets and financial liabilities. *Financial assets represent claims for the payment of a sum of money sometime in the future (repayment of principal) and/or a periodic payment in the form of interest or dividend.* Financial liabilities are the counterparts of financial assets. They represent promise to pay some portion of prospective income and wealth to others. Financial assets and liabilities arise from the basic process of financing. Some of the financial instruments are tradable/ transferable. Others are non-tradable/non-transferable. Financial assets like deposits with banks, companies and post offices, insurance policies, NSCs, provident funds and pension funds are not tradable. Securities (included in financial assets) like equity shares and debentures, or government securities and bonds are tradable. Hence they are transferable. In short, financial instruments are instruments through which a company raises finance.

The financial instruments may be capital market instruments or money market instruments or hybrid instruments. The financial instruments that are used for raising capital through the capital market are known as capital market instruments. These include equity shares, preference shares, warrants, debentures and bonds. These securities have a maturity period of more than one year.

The financial instruments that are used for raising and supplying money in
a short period not exceeding one year through money market are called money market instruments. Examples are treasury bills, commercial paper, call money, short notice money, certificates of deposits, commercial bills, money market mutual funds.

Hybrid instruments are those instruments which have both the features of equity and debenture. Examples are convertible debentures, warrants etc.

Financial instruments may also be classified as cash instruments and derivative instruments. Cash instruments are financial instruments whose value is determined directly by markets. Derivative instruments are financial instruments which derive their value from some other financial instrument or variable.

Financial instruments can also be classified into primary instruments and secondary instruments. Primary instruments are instruments that are directly issued by the ultimate investors to the ultimate savers. For example, shares and debentures directly issued to the public. Secondary instruments are issued by the financial intermediaries to the ultimate savers. For example, UTI and mutual funds issue securities in the form of units to the public.

Characteristics of Financial Instruments

The important characteristics of financial instruments may be outlined as below:

1. Liquidity: Financial instruments provide liquidity. These can be easily and quickly converted into cash.
2. Marketing: Financial instruments facilitate easy trading on the market. They have a ready market.
3. Collateral value: Financial instruments can be pledged for getting loans.
4. Transferability: Financial instruments can be easily transferred from person to person.
5. Maturity period: The maturity period of financial instruments may be short term, medium term or long term.
6. Transaction cost: Financial instruments involve buying and selling cost. The buying and selling costs are called transaction costs. These are lower.
7. Risk: Financial instruments carry risk. This is because there is uncertainty with regard to payment of principal or interest or dividend as the case may be.
8. Future trading: Financial instruments facilitate future trading so as to cover risks due to price fluctuations, interest rate fluctuations etc.

IV. Financial Services

The development of a sophisticated and matured financial system in the country, especially after the early nineties, led to the emergence of a new sector.

This new sector is known as financial services sector. Its objective is to intermediate and facilitate financial transactions of individuals and institutional investors. The financial institutions and financial markets help the financial system through financial instruments. The financial services include all

activities connected with the transformation of savings into investment. Important financial services include lease financing, hire purchase, instalment payment systems, merchant banking, factoring, forfaiting etc.

Financial Market deals in financial instruments (securities) and financial services. Financial markets are classified into two, namely, money market and capital market. Meaning of Money Market Money market is a segment of financial market. It is a market for short term funds. It deals with all transactions in short term securities. These transactions have a maturity period of one year or less. Examples are bills of exchange, treasury bills etc. These short term instruments can be converted into money at low transaction cost and without much loss. Thus, money market is a market for short term financial securities that are equal to money.

According to Crowther, *"Money market is a collective name given to various firms and institutions that deal in the various grades of near money"*.

Money market is not a place. It is an activity. It includes all organizations and institutions that deal in short term financial instruments. However, sometimes geographical names are given to the money market according to the location, e.g. Mumbai Money Market.

Characteristics of Money Market

The following are the characteristics of money market:

1. It is a market for short term financial assets that are close substitutes of money.
2. It is basically an over the phone market.
3. It is a wholesale market for short term debt instruments.
4. It is not a single market but a collection of markets for several instruments.
5. It facilitates effective implementation of monetary policy of a central bank of a country.
6. Transactions are made without the help of brokers.
7. It establishes the link between the RBI and banks.
8. The players in the money market are RBI, commercial banks, and companies.

Functions of Money Market

Money market performs the following functions:

1. Facilitating adjustment of liquidity position of commercial banks, business undertakings and other non-banking financial institutions.
2. Enabling the central bank to influence and regulate liquidity in the economy through its intervention in the market.
3. Providing a reasonable access to users of short term funds to meet their requirements quickly at reasonable costs.
4. Providing short term funds to govt. institutions.
5. Enabling businessmen to invest their temporary surplus funds for short period.
6. Facilitating flow of funds to the most important uses.
7. Serving as a coordinator between borrowers and lender of short term funds.
8. Helping in promoting liquidity and safety of financial assets.

The main components or constituents or sub markets of money markets are as follows:

1. Call money market
2. Commercial bill market
3. Treasury bill markets
4. Certificates of deposits market

5. Commercial paper market
6. Acceptance market
7. Collateral loan market

I. Call Money Market

Call money is required mostly by banks. Commercial banks borrow money without collateral from other banks to maintain a minimum cash balance known as cash reserve ratio (CRR). This interbank borrowing has led to the development of the call money market. Call money market is the market for very short period loans. If money is lent for a day, it is called call money. If money is lent for a period of more than one day and upto 14 days is called *short notice money*. Thus call money market refers to a market where the maturity of loans varies between 1 day to 14 days. In the call money market, surplus funds of financial institutions, and banks are traded. There is no demand for collateral security against call money. In India call money markets are mainly located in big industrial and commercial centres like Mumbai, Kolkata, Chennai, Delhi and Ahmadabad.

Participants or Players in the Call Money Market

1. Scheduled commercial banks and RBI
2. Non-Scheduled commercial banks
3. Co-operative banks
4. Foreign banks
5. Discount and Finance House of India
6. Primary dealers

The above players are permitted to operate both as lenders and borrowers.

(1) LIC (2) UTI (3) GIC (4) IDBI (5) NABARD (6) Specific mutual funds, etc.

The above participants are permitted to operate as lenders

2. Commercial Bill Market

Commercial bill market is another segment of money market. It is a market in which commercial bills (short term) are bought and sold. Commercial bills are important instruments. They are widely used in both domestic and foreign trade to discharge the business obligations (or to settle business obligations). Discounting is the main process in this market. Hence commercial bill market is also known as *discount market*.

There are specialized institutions known as discount houses for discounting commercial bills accepted by reputed acceptance houses. RBI has permitted the financial institutions, mutual funds, commercial banks and cooperative banks to enter in the commercial bill market.

3. Treasury Bills Market

Treasury bill market is a market which deals in treasury bills. In this market, treasury bills are bought and sold. Treasury bill is an important instrument of short term borrowing by the Govt. These are the promissory notes or a kind of finance bill issued by the Govt. for a fixed period not extending beyond one year. Treasury bill is used by the Govt. to raise short term funds for meeting temporary Govt. deficits. Thus it represents short term borrowings of the Govt.

Advantages or Importance of Treasure Bill Market

Advantages to the Issuer / Govt.

1. The Govt. can raise short term funds for meeting temporary budget deficit.
2. The Govt. can absorb excess liquidity in the economy through the issue of Tbills in the market.
3. It does not lead to inflationary pressure.

Advantages for the Purchaser/ Investor

1. It is a ready market for purchasers or investors.
2. It is a safety instrument to invest.
3. Treasury bills are eligible securities for SLR requirement.
4. The market provides hedging facility.

4. Certificates of Deposits Market

CD market is a market which deals in CDs. CDs are short term deposit instruments to raise large sums

of money. These are short term deposits which are transferable from one party to another. Banks and financial institutions are major issuers of CD. These are short term negotiable instruments.

Advantages of CD Market

1. It enables the depositors to earn higher return on their short term surplus.
2. The market provides maximum liquidity.
3. The bank can raise money in times of need. This will improve their lending capacity.
4. The market provides an opportunity for banks to invest surplus funds.
5. The transaction cost of CDs is lower.

5. Commercial Paper Market

Commercial Paper Market is another segment of money market. It is a market which deals in commercial papers. Commercial papers are unsecured short term promissory notes issued by reputed, well established and big companies having high credit rating. These are issued at a discount. Commercial papers can now be issued by primary dealers and all India financial institutions.

They can be issued to (or purchased by) individuals, banks, companies and other registered Indian corporate bodies. (Investors in CP)

Role of RBI in the Commercial Paper Market

6. Acceptance Market

Acceptance Market is another component of money market. It is a market for banker's acceptance. The acceptance arises on account of both home and foreign trade. Bankers acceptance is a draft drawn by a business firm upon a bank and accepted by that bank. It is required to pay to the order of a particular party or to the bearer, a certain specific amount at a specific date in future. It is commonly used to settle payments in international trade. Thus acceptance market is a market where the bankers' acceptances are easily sold and discounted.

7. Collateral Loan Market

Collateral loan market is another important sector of the money market. The collateral loan market is a market which deals with collateral loans. Collateral means anything pledged as security for repayment of a loan. Thus collateral loans are loans backed by collateral securities such as stock, bonds etc. The collateral loans are given for a few months. The collateral security is returned to the borrower when the loan is repaid. When the borrower is not able to repay the loan, the collateral becomes the property of the lender. The borrowers are generally the dealers in stocks and shares.

Money Market Instruments

Money market is involved in buying and selling of short term instruments. It is through these instruments, the players or participants borrow and lend money in the money market. There are various instruments available in the money market. The important money market instruments are:-

1. Call and short notice money
2. Commercial bills
3. Treasury bills
4. Certificate of deposits
5. Commercial papers
6. Repurchase agreements
7. Money market mutual funds.
8. ADR/GDR

These instruments are issued for short period. These are interest bearing securities. These instruments may be discussed in detail in the following pages.

1. Call and Short Notice Money

These are short term loans. Their maturity varies between one day to fourteen days. If money is borrowed or lent for a day it is called call money or overnight money. When money is borrowed or lent for more than a day and up to fourteen days, it is called short notice money.

2. Commercial Bills

When goods are sold on credit, the seller draws a bill of exchange on the buyer for the amount due.

The buyer accepts it immediately. This means he agrees to pay the amount mentioned therein after a certain specified date. After accepting the bill, the buyer returns it to the seller. This bill is called trade bill. The seller may either retain the bill till maturity or due date or get it discounted from some banker and get immediate cash. When trade bills are accepted by commercial banks, they are called commercial bills. The bank discounts this bill by deducting a certain amount (discount) and balance is paid.

3. Treasury Bills

Treasury bills are short term instruments issued by RBI on behalf of Govt. These are short term credit instruments for a period ranging from 91 to 364. These are negotiable instruments. Hence, these are freely transferable. These are issued at a discount. These are repaid at par on maturity. These are considered as safe investment.

Thus treasury bills are credit instruments used by the Govt. to raise short term funds to meet the budgetary deficit. Treasury bills are popularly called Tbills. The difference between the amount paid by the tenderer at the time of purchase (which is less than the face value), and the amount received on maturity represents the interest amount on T-bills and is known as the discount.

4. Certificate of Deposits (CDs)

With a view to give investor's greater flexibility in the development of their short term surplus funds, RBI permitted banks to issue Certificate of Deposit. CDs were introduced in June 1989. CD is a certificate in the form of promissory note issued by banks against the short term deposits of companies and institutions, received by the bank. Simply stated, it is a time deposit of specific maturity and is easily transferable. It is a document of title to a time deposit. It is issued as a bearer instrument and is negotiable in the market. It is payable on a fixed date. It has a maturity period ranging from three to twelve months. It is issued at a discount rate varying between 13% to 18%. The discount rate is determined by the issuing bank and the market. All scheduled banks except

5. Commercial Papers (CPs)

Commercial paper was introduced into the market in 1989-90. It is a finance paper like Treasury bill. It is an unsecured, negotiable promissory note. It has a fixed maturity period ranging from three to six months. It is generally issued by leading, nationally reputed credit worthy and highly rated corporations. It is quite safe and highly liquid. It is issued in bearer form and on discount. It is also known as *industrial paper* or *corporate paper*.

7. Money Market Mutual Funds (MMMFs)

Money Market Mutual Funds mobilise money from the general public. The money collected will be invested in money market instruments. The investors get a higher return. They are more liquid as compared to other investment alternatives.

8. American Depository Receipt and Global Depository Receipt

ADRs are instruments in the nature of depository receipt and certificate.

These instruments are negotiable and represent publicly traded, local currency equity shares issued by non - American company. For example, an NRI can invest in Indian Company's shares without bothering dollar conversion and other exchange formalities.

If the facilities extended globally, these instruments are called GDR. ADR are listed in American Stock exchanges and GDR are listed in other than American Stock exchanges, say Landon, Luxembourg, Tokyo etc.,

CAPITAL MARKET:

There are many persons or organizations that require capital. Similarly, there are several persons or organizations that have surplus capital. They want to dispose of (or invest) their surplus capital. Capital market is a meeting place of these two broad categories of persons or organizations.

Meaning and Definition of Capital Market

Capital market simply refers to a market for long term funds. It is a market for buying and selling of

equity, debt and other securities. Generally, it deals with long term securities that have a maturity period of above one year.

Capital market is a vehicle through which long term finance is channelized for the various needs of industry, commerce, govt. and local authorities.

According to W.H. Husband and J.C. Dockerbay, *"the capital market is used to designate activities in long term credit, which is characterised mainly by securities of investment type".*

Thus, capital market may be defined as an organized mechanism for the effective and smooth transfer of money capital or financial resources from the investors to the entrepreneurs.

Characteristics of Capital Market

1. It is a vehicle through which capital flows from the investors to borrowers.
2. It generally deals with long term securities.
3. All operations in the new issues and existing securities occur in the capital market.
4. It deals in many types of financial instruments. These include equity shares, preference shares, debentures, bonds, etc. These are known as securities. It is for this reason that capital market is known as 'Securities Market'.
5. It functions through a number of intermediaries such as banks, merchant bankers, brokers, underwriters, mutual funds etc. They serve as links between investors and borrowers.
6. The constituents (players) in the capital market include individuals and institutions. They include individual investors, investment and trust companies, banks, stock exchanges, specialized financial institutions etc.

Functions of a Capital Market

The functions of an efficient capital market are as follows:

1. Mobilise long term savings for financing long term investments.
2. Provide risk capital in the form of equity or quasi-equity to entrepreneurs.
3. Provide liquidity with a mechanism enabling the investor to sell financial assets.
4. Improve the efficiency of capital allocation through a competitive pricing mechanism.
5. Disseminate information efficiently for enabling participants to develop an informed opinion about investment, disinvestment, reinvestment etc.
6. Enable quick valuation of instruments – both equity and debt.
7. Provide insurance against market risk through derivative trading and default risk through investment protection fund.
8. Provide operational efficiency through: (a) simplified transaction procedures, (b) lowering settlement times, and (c) lowering transaction costs.
9. Develop integration among: (a) debt and financial sectors, (b) equity and debt instruments, (c) long term and short term funds.
10. Direct the flow of funds into efficient channels through investment and disinvestment and reinvestment.

There are two components of capital market

A. Primary Market /New Issue Market (NIM)

Every company needs funds. Funds may be required for short term or long term. Short term requirements of funds can be met through banks, lenders, institutions etc. When a company wishes to raise long term capital, it goes to the primary market. Primary market is an important constituent of a capital market. In the primary market the security is purchased directly from the issuer.

Meaning of Primary Market

The primary market is a market for new issues. It is also called *new issue market.* It is a market for fresh capital. It deals with the new securities which were not previously available to the investing public. Corporate enterprises and Govt. raises long term funds from the primary market by issuing financial securities.

Both the new companies and the existing companies can issue new securities on the primary market. It also covers raising of fresh capital by government or its agencies.

The primary market comprises of all institutions dealing in fresh securities. These securities may be in the form of equity shares, preference shares, debentures, right issues, deposits etc.

B. secondary Market

The investors want liquidity for their investments. When they need cash, they should be able to sell the securities they hold. Similarly there are others who want to invest in new securities. There should be a place where securities of different companies can be bought and sold. Secondary market provides such a place.

Meaning of Secondary Market

Secondary market is a market for old issues. It deals with the buying and selling existing securities i.e. securities already issued. In other words, securities already issued in the primary market are traded in the secondary market. Secondary market is also known as stock market. The secondary market operates through 'stock exchanges'.

In the secondary market, the existing owner sells securities to another party. The secondary markets support the primary markets. The secondary market provides liquidity to the individuals who acquired these securities. The primary market gets benefits greatly from the liquidity provided by the secondary market. This is because investors would hesitate to buy the securities in the primary market if they thought they could not sell them in the secondary market later.

Regulatory Authorities

The main component of any financial system is the regulatory system it has. In any economy, the financial system is regulated by the central banking authority of that country. In India, the central bank is named as the Reserve Bank of India.

The Reserve Bank of India

The regulation and supervision of banking institutions is mainly governed by the Companies Act, 1956, Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970/1980, Bankers' Books Evidence Act, Banking Secrecy Act and Negotiable Instruments Act, 1881. The regulation and supervision of finance companies is done by the Banking Regulation Act, 1949 which governs the financial sector. Individual Institutions are regulated by Acts like:

State Bank of India Act, 1954
The Industrial Development Bank (Transfer of Undertaking and Repeal) Act, 2003
The Industrial Finance Corporation (Transfer of Undertaking and Repeal) Act, 1993
National Bank for Agriculture and Rural Development Act
National Housing Bank Act
Deposit Insurance and Credit Guarantee Corporation Act

Securities and Exchange Board of India

The Securities and Exchange Board of India was established on April 12, 1992 in accordance with the provisions of the Securities and Exchange Board of India Act, 1992 to protect the interests of investors in securities and to promote the development of, and to regulate the securities market and for matters connected therewith or incidental thereto.

Insurance Regulatory and Development Authority

Insurance Regulatory and Development Authority regulates and supervises the insurance industry - insurance companies and their agents and insurance brokers to protect the interests of the policyholders, to regulate, promote and ensure orderly growth of the insurance industry and for matters connected therewith or incidental thereto.

Financial Institutions

The financial system consists of many financial institutions. While most of them are regulated by the Reserve Bank, there are some which it manages just indirectly.

Institutions Regulated by the Reserve Bank of India

The institutions regulated by the RBI are:

Nationalised Commercial Banks
Specialised Banks
Registered Finance Companies
Registered Finance Leasing Establishments
Micro-Finance Institutions.

Institutions Not Regulated by the Reserve Bank of India

Certain financial institutions are not regulated by the Reserve Bank of India. These include securities firms, investment banks and mutual funds which come under the purview of the SEBI, Insurance Companies and Insurance Brokers which are regulated by the IRDA, etc.

UNIT-IV
CAPITAL BUDGETING

Capital Budgeting: Capital budgeting is the process of making investment decision in long-term assets or courses of action. Capital expenditure incurred today is expected to bring its benefits over a period of time. These expenditures are related to the acquisition & improvement of fixes assets.

Capital budgeting is the planning of expenditure and the benefit, which spread over a number of years. It is the process of deciding whether or not to invest in a particular project, as the investment possibilities may not be rewarding. The manager has to choose a project, which gives a rate of return, which is more than the cost of financing the project. For this the manager has to evaluate the worth of the projects in-terms of cost and benefits. The benefits are the expected cash inflows from the project, which are discounted against a standard, generally the cost of capital.

Capital Budgeting Process:

The capital budgeting process involves generation of investment, proposal estimation of cash-flows for the proposals, evaluation of cash-flows, selection of projects based on acceptance criterion and finally the continues revaluation of investment after their acceptance the steps involved in capital budgeting process are as follows.

1. Project generation
2. Project evaluation
3. Project selection
4. Project execution

1. Project generation: In the project generation, the company has to identify the proposal to be undertaken depending upon its future plans of activity. After identification of the proposals they can be grouped according to the following categories:

a. **Replacement of equipment:** In this case the existing outdated equipment and machinery may be replaced by purchasing new and modern equipment.

b. **Expansion:** The Company can go for increasing additional capacity in the existing product line by purchasing additional equipment.

c. Diversification: The Company can diversify its product line by way of producing various products and entering into different markets. For this purpose, It has to acquire the fixed assets to enable producing new products.

d. Research and Development: Where the company can go for installation of research and development suing by incurring heavy expenditure with a view to innovate new methods of production new products etc.,

2. Project evaluation: In involves two steps.

a. Estimation of benefits and costs: These must be measured in terms of cash flows. Benefits to be received are measured in terms of cash flows. Benefits to be received are measured in terms of cash in flows, and costs to be incurred are measured in terms of cash flows.

b. Selection of an appropriate criterion to judge the desirability of the project.

3. Project selection: There is no standard administrative procedure for approving the investment decisions. The screening and selection procedure would differ from firm to firm. Due to lot of importance of capital budgeting decision, the final approval of the project may generally rest on the top management of the company. However the proposals are scrutinized at multiple levels. Some times top management may delegate authority to approve certain types of investment proposals. The top management may do so by limiting the amount of cash out lay. Prescribing the selection criteria and holding the lower management levels accountable for the results.

4. Project Execution: In the project execution the top management or the project execution committee is responsible for effective utilization of funds allocated for the projects. It must see that the funds are spent in accordance with the appropriation made in the capital budgeting plan. The funds for the purpose of the project execution must be spent only after obtaining the approval of the finance controller. Further to have an effective cont. It is necessary to prepare monthly budget reports to show clearly the total amount appropriated, amount spent and to amount unspent.

FINANCIAL APPRAISAL

Financial Appraisal is the structured process of assessing the viability of a project or proposal. It involves calculating the feasibility of the project before committing resources to it. It is a tool that company's use for choosing the best project that would help them to attain their goal. Project

appraisal often involves making comparison between various options and this done by making use of any decision technique or economic appraisal technique.

Project appraisal is a tool which is also used by companies to review the projects completed by it. This is done to know the effect of each project on the company. This means that the project appraisal is done to know, how much the company has invested on the project and in return how much it is gaining from it.

Process of financial appraisal

The process of project appraisal consists of five steps and they are – initial assessment, defining problem and long-list, consulting and short-list, developing options, and comparing and selecting project. The process of appraisal generally starts from the initial phase of the project. If the appraisal process starts from an early stage, then the company will be in a better position to decide how capital should be spend in the project and also it will help them to make the decision of not spending too much or stopping a project that is not economically viable.

Types of financial appraisal

Appraisal of projects can be done by many ways, but the most common of them are financial and economic appraisal. In case of financial project appraisal, the company reviews the cost of the project and the expected revenues that will be generated by the project. This type of appraisal helps the company to prevent overspending on a project. It also helps in finding certain areas where alterations can be done for generating higher revenues. Under economic appraisal, the company mainly focuses on the total benefit of the project and less on the costs spent on the project. Other than these two types of appraisal, there are also other types of project appraisal which include technical appraisal, management or organizational appraisal and marketing and commercial appraisal.

Capital budgeting Techniques:

The capital budgeting appraisal methods are techniques of evaluation of investment proposal will help the company to decide upon the desirability of an investment proposal depending upon their; relative income generating capacity and rank them in order of their desirability. These methods provide the company a set of norms on the basis of which either it has to accept or reject the investment proposal. The most widely accepted techniques used in estimating the cost-returns of investment projects can be grouped under two categories.

1. Traditional methods
2. Discounted Cash flow methods

1. Traditional methods

These methods are based on the principles to determine the desirability of an investment project on the basis of its useful life and expected returns. These methods depend upon the accounting information available from the books of accounts of the company. These will not take into account the concept of 'time value of money', which is a significant factor to determine the desirability of a project in terms of present value.

A. Pay-back period method: It is the most popular and widely recognized traditional method of evaluating the investment proposals. It can be defined, as 'the number of years required to recover the original cash out lay invested in a project'.

According to Weston & Brigham, "The pay back period is the number of years it takes the firm to recover its original investment by net returns before depreciation, but after taxes".

According to James. C. Vanhorne, "The payback period is the number of years required to recover initial cash investment.

The pay back period is also called payout or payoff period. This period is calculated by dividing the cost of the project by the annual earnings after tax but before depreciation under this method the projects are ranked on the basis of the length of the payback period. A project with the shortest payback period will be given the highest rank and taken as the best investment. The shorter the payback period, the less risky the investment is the formula for payback period is

$$\text{Pay-back period} = \frac{\text{Cash outlay (or) original cost of project}}{\text{Annual cash inflow}}$$

Merits:

1. It is one of the earliest methods of evaluating the investment projects.
2. It is simple to understand and to compute.
3. It dose not involve any cost for computation of the payback period
4. It is one of the widely used methods in small scale industry sector
5. It can be computed on the basis of accounting information available from the books.

Demerits:

1. This method fails to take into account the cash flows received by the company after the pay back period.
2. It doesn't take into account the interest factor involved in an investment outlay.

3. It doesn't take into account the interest factor involved in an investment outlay.
4. It is not consistent with the objective of maximizing the market value of the company's share.
5. It fails to consider the pattern of cash inflows i. e., the magnitude and timing of cash in flows.

B. Accounting (or) Average rate of return method (ARR):

It is an accounting method, which uses the accounting information repeated by the financial statements to measure the probability of an investment proposal. It can be determine by dividing the average income after taxes by the average investment i.e., the average book value after depreciation.

According to 'Soloman', accounting rate of return on an investment can be calculated as the ratio of accounting net income to the initial investment, i.e.,

$$ARR = \frac{\text{Average net income after taxes}}{\text{Average Investment}} \times 100$$

$$\text{Average net income after taxes} = \frac{\text{Total Income after Taxes}}{\text{No. Of Years}}$$

$$\text{Average investment} = \frac{\text{Total Investment}}{2}$$

On the basis of this method, the company can select all those projects who's ARR is higher than the minimum rate established by the company. It can reject the projects with an ARR lower than the expected rate of return. This method can also help the management to rank the proposal on the basis of ARR. A highest rank will be given to a project with highest ARR, where as a lowest rank to a project with lowest ARR.

Merits:

It is very simple to understand and calculate.

1. It can be readily computed with the help of the available accounting data.
2. It uses the entire stream of earning to calculate the ARR.

Demerits:

1. It is not based on cash flows generated by a project.
2. This method does not consider the objective of wealth maximization
3. IT ignores the length of the projects useful life.
4. It does not take into account the fact that the profits can be re-invested.

II: Discounted cash flow methods:

The traditional method does not take into consideration the time value of money. They give equal weight age to the present and future flow of incomes. The DCF methods are based on the concept that a rupee earned today is more worth than a rupee earned tomorrow. These methods take into consideration the profitability and also time value of money.

A. Net present value method (NPV)

The NPV takes into consideration the time value of money. The cash flows of different years and valued differently and made comparable in terms of present values for this the net cash inflows of various period are discounted using required rate of return which is predetermined.

According to Ezra Solomon, "It is a present value of future returns, discounted at the required rate of return minus the present value of the cost of the investment."

NPV is the difference between the present value of cash inflows of a project and the initial cost of the project.

According the NPV technique, only one project will be selected whose NPV is positive or above zero. If a project(s) NPV is less than 'Zero'. It gives negative NPV hence. It must be rejected. If there are more than one project with positive NPV's the project is selected whose NPV is the highest.

The formula for NPV is

NPV= Present value of cash inflows – investment.

C1 C2

$$NPV = \frac{}{(1+K)} + \frac{}{(1+k)^2} + \frac{}{(1+K)^3} + \frac{}{}$$

Co- investment

C1, C2, C3... Cn= cash inflows in different years.

K= Cost of the Capital (or) Discounting rate

D= Years.

Merits:

1. It recognizes the time value of money.
2. It is based on the entire cash flows generated during the useful life of the asset.
3. It is consistent with the objective of maximization of wealth of the owners.
4. The ranking of projects is independent of the discount rate used for determining the present value.

Demerits:

1. It is different to understand and use.
2. The NPV is calculated by using the cost of capital as a discount rate. But the concept of cost of capital. If self is difficult to understood and determine.
3. It does not give solutions when the comparable projects are involved in different amounts of investment.
4. It does not give correct answer to a question whether alternative projects or limited funds are available with unequal lines.

B. Internal Rate of Return Method (IRR)

The IRR for an investment proposal is that discount rate which equates the present value of cash inflows with the present value of cash out flows of an investment. The IRR is also known as cutoff or handle rate. It is usually the concern's cost of capital.According to Weston and Brigham "The internal rate is the interest rate that equates the present value of the expected future receipts to the cost of the investment outlay.

When compared the IRR with the required rate of return (RRR), if the IRR is more than RRR then the project is accepted else rejected. In case of more than one project with IRR more than RRR, the one, which gives the highest IRR, is selected.

The IRR is not a predetermine rate, rather it is to be trial and error method. It implies that one has to start with a discounting rate to calculate the present value of cash inflows. If the obtained present value is higher than the initial cost of the project one has to try with a higher rate. Like wise if the

present value of expected cash inflows obtained is lower than the present value of cash flow. Lower rate is to be taken up. The process is continued till the net present value becomes Zero. As this discount rate is determined internally, this method is called internal rate of return method.

$$IRR = L + \frac{P1 - Q}{P1 - P2} \times D$$

L- Lower discount rate

P1 - Present value of cash inflows at lower rate.

P2 - Present value of cash inflows at higher rate.

Q- Actual investment

D- Difference in Discount rates.

Merits:

1. It consider the time value of money
2. It takes into account the cash flows over the entire useful life of the asset.
3. It has a psychological appear to the user because when the highest rate of return projects are selected, it satisfies the investors in terms of the rate of return an capital
4. It always suggests accepting to projects with maximum rate of return.
5. It is inconformity with the firm's objective of maximum owner's welfare.

Demerits:

1. It is very difficult to understand and use.
2. It involves a very complicated computational work.
3. It may not give unique answer in all situations.

C. Probability Index Method (PI)

The method is also called benefit cost ration. This method is obtained cloth a slight modification of the NPV method. In case of NPV the present value of cash out flows are profitability index (PI), the present value of cash inflows are divide by the present value of cash out flows, while NPV is a

absolute measure, the PI is a relative measure.

It the PI is more than one (>1), the proposal is accepted else rejected. If there are more than one investment proposal with the more than one PI the one with the highest PI will be selected. This method is more useful incase of projects with different cash outlays cash outlays and hence is superior to the NPV method.

The formula for PI is

$$\text{Probability index} = \frac{\text{Present Value of Future Cash Inflow}}{\text{Investment}}$$

Merits:

1. It requires less computational work then IRR method
2. It helps to accept / reject investment proposal on the basis of value of the index.
3. It is useful to rank the proposals on the basis of the highest/lowest value of the index.
4. It is useful to tank the proposals on the basis of the highest/lowest value of the index.
5. It takes into consideration the entire stream of cash flows generated during the useful life of the asset.

Demerits:

1. It is some what difficult to understand
2. Some people may feel no limitation for index number due to several limitation involved in their competitions
3. It is very difficult to understand the analytical part of the decision on the basis of probability index.

TIME VALUE OF MONEY

A bird in hand is worth two in the bush' – this adage applies to financial transactions too. Say, someone borrowed a certain amount from you and it is due. Just as you are expecting the money to be credited to your account, you get a call from the borrower saying that he will pay you after 3 months. You are not happy about this. This is because you are aware of time value of money

There is no reason for any rational person to delay taking an amount owed to him or her. More than financial principles, this is basic instinct. The money you have in hand at the moment is worth more than the same amount you 'may' get in future. One reason for this is inflation and another is possible earning capacity. The fundamental code of finance maintains that, given money can generate interest, the value of a certain sum is more if you receive it sooner. This is why it is called as the present value.

Basically, the time value of money validates that it is more beneficial to have cash now than later. Say, if you invest a Rs. 100 today – the returns will be more compared to the same investment made 2 months from now. Moreover, there is always a risk that the borrower might delay even more or not pay at all in the future.

Example:

The relevance of TVM depends on how much returns you can generate from the capital available. Money has immense growth potential and the more you delay employing this potential, the more you lose the chance to earn on it. For instance, if a friend or lender gives you two options – to take Rs. 10,000 today or to take Rs, 10,500 next year.

Now, even if this promise is from someone or an entity you trust implicitly, chances are more that the second option is a raw deal. With more and more schemes ranging from low-risk to high-risk – tax-saving FDs, etc. – there is a high chance that you can make at least 7% on this sum, which is Rs. 10,700. But if the interest rate offered is less than 5%, then you may consider taking the money next year. So, it depends on the possible returns as per the RBI guidelines or the market.

Present Value and Future Value

Present Value is the same as Time Value as elaborated above. It is the money you have currently that is equal to a future one-time disbursal or several part-payments – discounted by a suitable rate of interest.

Future Value is the sum of money that any saving scheme with a compounded interest will build to by a pre-decided future date. It applies to both lump sum as well as recurring investments like SIP(systematic investment plan.

Formula

Based on your financial circumstances at the time, the TVM formula can vary to some extent. Example, in the case of annuity (income) or perpetuity (until death) pension payments, the general formula can have more components. But as a whole, the basic TVM formula is as shown in the image.

$FV = PV \times [\ 1 + (I/\ N)\ ]\ (N*T)$

Where,
FV is Future value of money,
PV is Present value of money,
I is the interest rate,
N is the number of compounding periods annually and
T is the number of years in the tenure.

For instance, if you invest Rs. 1 lakh for 5 years at 10% interest, the future value of this one lakh will

be Rs. 161,051 as per the formula. This formula can help you to analyze different investments over different time periods, enabling you to make optimal and informed financial decisions.

COMPOUNTING AND DISCOUNTING

Time Value of Money says that the worth of a unit of money is going to be changed in future. Put simply, the value of one rupee today will be decreased in future. The whole concept is about the present value and future value of money. There are two methods used for ascertaining the worth of money at different points of time, namely, compounding and discounting. Compounding method is used to know the future value of present money. Conversely, discounting is a way to compute the present value of future money.

Compounding is helpful to know the future values, of the cash flow, at the end of the particular period, at a definite rate. Contrary to this, Discounting is used to determine the present value of the future cash flow, at a certain interest rate.

Definition of Compounding

For understanding the concept of compounding, first of all, you need to know about the term future value. The money you invest today, will grow and earn interest on it, after a certain period, which will automatically change its value in future. So the worth of the investment in future is known as its Future Value. Compounding refers to the process of earning interest on both the principal amount, as well as accrued interest by reinvesting the entire amount to generate more interest.

Compounding is the method used in finding out the future value of the present investment. The future value can be computed by applying the compound interest formula which is as under:

Future Value:

$$\text{Single Cash Flow} = \text{Amount } (1+R)^n$$

$$\text{Annuity} = \text{Amount X } \frac{[(1+R)^n - 1]}{R}$$

Where n = number of years
R = Rate of return on investment.

Definition of Discounting

Discounting is the process of converting the future amount into its Present Value. Now you may wonder what is the present value? The current value of the given future value is known as Present Value. The discounting technique helps to ascertain the present value of future cash flows by applying a discount rate. The following formula is used to know the present value of a future sum:

$$\text{Present Value} = \frac{FV_1}{(1+R)^1} + \frac{FV_2}{(1+R)^2} + \frac{FV_3}{(1+R)^3} + \ldots\ldots\ldots\ldots + \frac{FV_n}{(1+R)^n}$$

Where 1,2,3,.....n represents future years
FV = Cash flows generated in different years,
R = Discount Rate

For calculating the present value of single cash flow and annuity the following formula should be used:

Present Value:

$$\text{Single Cash Flow} = \text{Amount X } \frac{1}{(1+R)^n}$$

$$\text{Annuity} = \text{Amount X } \frac{[(1+R)^n - 1]}{R(1+R)^n}$$

Where R = Discount Rate
n = number of years

You can also use discount factor to arrive at the present value of a future amount by simply multiplying the factor with the future value. For this purpose, you need to refer the present value table.

Comparison Chart

Basis for Comparison	Compounding	Discounting
Meaning	The method used to determine the future value of present investment is known as Compounding.	The method used to determine the present value of future cash flows is known as Discounting.
Concept	If we invest some money today, what will be the amount we get at a future date.	What should be the amount we need to invest today, to get a specific amount in future.
Use of	Compound interest rate.	Discount rate
Known	Present Value	Future Value
Factor	Future Value Factor or Compounding Factor	Present Value Factor or Discounting Factor
Formula	FV = PV (1 + r)^n	PV = FV / (1 + r)^n

Compounding and Discounting are simply opposite to each other. Compounding converts the present value into future value and discounting converts the future value into present value. So, we can say that if we reverse compounding it will become discounting. Compounding Factor table and Discounting Factor table is taken into consideration for the quick calculation of the two. In the table, you will find the factors, concerning different rates and periods. The factor is directly multiplied by the amount to arrive the present or future value.

FUTURE VALUE

As mentioned earlier, the future value is nothing but the value of the money or cash that happens in any sort of investment in the coming future. Hence, it specifically tells the value of today's money that it will amount to in the coming future.

So, for example, suppose you are investing a sum of Rs. 2,000 in some fixed deposit. For the same, you receive a rate of interest of 7%. Therefore, by the end of the very first year, you gain Rs. 2,140.

Hence, the amount Rs. 2,140 holds the principal amount i.e. Rs. 2,000 and the interest i.e. Rs. 140.

Furthermore, we can say that, "*Rs. 2,140 is nothing but the future value of today's money i.e. Rs. 2,000 kept for* a year *at an interest rate of 7%.*" Hence, we can claim the fact that, Rs. 2,140 is tomorrow's value of today's money.

Similarly, you can calculate the value of Rs. 2,140 after two years and so on. All you need to do is apply the formula for compound interest to get the value of your today's money after a certain time span.

Future Value of Single / Multiple Cash Flows

To find out the future value of cash flows, we have to apply the compounding technique. Compounding may be yearly, half-yearly, quarterly, monthly etc.

Future Value of Single Cash Flow

Future value can be computed by the following formula:

$FV_n = PV (1 + r)^n$

Where

FV = Future value

PV = Present value

r = Rate of Interest

n = Number of periods

Example: FV of single cash flow compounded annually

Let us calculate the future value of an investment of $ 2,000 compounded annually at the rate of 12%, after 4 years period.

$FV = \$ 2,000 \times (1 + 0.12)^4$

$= \$ 3,147.04$

Frequent Compounding:

Interest is compounded often more than once a year. In such cases, the formula for FV becomes:

In this case, the formula for FV becomes:

$FV_n = PV (1 + (r / m))^{n \times m}$

Where:

m = Number of total compounding periods in a year

If compounded semi-annually, m=2

If compounded quarterly, m = 4 and so on. The more frequent compounding occurs in a year, the more would be the future value as illustrated below.

Example: FV of single cash flow compounded semi-annually

In the above example, let us assume that the interest of 12% is compounded semi-annually; rest of details being the same, the future value after 4 years would be:

Here:

m = 2
FV = $ 2,000 x (1 + (0.12 / 2)) $^{4 \times 2}$
FV = $ 3,187.70

Thus, when interest is compounded yearly once, the FV is only $3,147.04 whereas if it is compounded twice a year, the FV is $3,187.70. Similarly, if interest is compounded quarterly or monthly, FV would accordingly be greater.

Future value using Simple Interest

If no interest is earned on the interest on the investment, it is called as simple interest. The future value of an investment in such cases would be calculated by the following formula:

FV_n = PV (1 + [n x r])

Where

n = Number of years
r = Interest Rate

The future value using a simple interest would obviously be lower than the future value using compound interest as there is no interest earned on the interest portion of the investment.

Example:

An investment of $10,000, if invested at 13% simple interest rate will in 6 years be:

FV = $ 10,000 x (1 + [6 X 0.13])
FV = $ 17,800

Future Value of Multiple Cash Flows

In many instances, we may be interested in the future value of series of payments of different amounts at different time periods. In such cases, we can find the FV as illustrated below:

Example:

A person deposits $1000, $4000 and $5000 at the end of each of the 5 respective years. The interest rate is 10%, compounded annually. Find the future value.

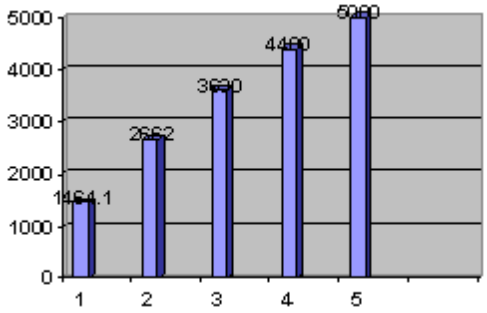
End of Year	Amount Deposited	No. of years compounded	Compounded Interest factor	Future Value (B x D)
A	B	C	D	E
1	$ 1,000	4	1.4641	$ 1,464.10
2	$ 2,000	3	1.331	$ 2,662.00
3	$ 3,000	2	1.21	$ 3,630.00

4	$ 4,000	1	1.1	$ 4,400.00
5	$ 5,000	0	1.0	$ 5,000.00
	TOTAL			$ 17,156.10

The compounded interest factor is calculated as given below:

For 4 years = $(1 + 0.10)^4 = 1.4641$
For 3 years = $(1 + 0.10)^3 = 1.331$ and so on...

Chart showing growth of individual deposited amounts from years 1 to 5



PRESENT VALUE

The Present Value concept is also called as discounting technique. In this approach, the money received in some future date will be worth lesser now at the present date because the corresponding interest is lost during the period. Given a positive rate of interest, the present value of future amount will always be lower, and thus this procedure is called as discounting.

If you received $100 today and deposited it into a savings account, it would grow over time to be worth *more* than $100. This fact of financial life is a result of the time value of money, a concept which says it's more valuable to receive $100 *now* rather than a year from now. To put it another way, the *present value* of receiving $100 one year from now is less than $100.

Accountants use Present Value (PV) calculations to account for the time value of money in a number of different applications. For example, assume your company provides a service in December 2018 and agrees to be paid $100 in December 2019. The time value of money tells us that the part of the $100 is interest you will earn for waiting one year for the $100. Perhaps only $91 of the $100 is service revenue earned in 2018 and $9 is interest that will be earned in 2019. The calculation of present value will remove the interest, so that the amount of the service revenue can be determined. Another example might involve the purchase of land: the owners will either sell it to you for $160,000 *today*, or for $200,000 if you pay at the end of two years. To help analyze the

alternatives, you would use a PV calculation to tell you the interest rate *implicit* in the second option.

PV calculations can also tell you such things as how much money to invest right now in return for specific cash amounts to be received in the future, or how to estimate the rate of return on your investments. Our focus will be on *single* amounts that are received or paid in the future. We'll discuss PV calculations that solve for the present value, the implicit interest rate, and/or the length of time between the present and future amounts

Calculations for the Present Value of a Single Amount

At the outset, it's important for you to understand that PV calculations involve *cash* amounts–not *accrual* amounts.

In present value calculations, future cash amounts are *discounted* back to the present time. (Discounting means removing the interest that is imbedded in the future cash amounts.) As a result, present value calculations are often referred to as a **discounted cash flow technique**.

PV calculations involve the compounding of interest. This means that any interest earned is reinvested and *itself* will earn interest at the same rate as the principal. In other words, you "*earn* interest *on* interest." The compounding of interest can be very significant when the interest rate and/or the number of years is sizeable.

We will use present value (PV) to mean a single future amount such as one receipt or one payment. Here are the components of a present value (PV) calculation:

1. Present value amount (PV)
2. Future value amount (FV)
3. Length of time before the future value amount occurs (n)
4. Interest rate used for discounting the future value amount (i)

If you know any **three** of these four components, you will be able to calculate the unknown component. Accountants are often called upon to calculate this unknown component.

Present Value – Single Cash Flows

The Present Value of a future single cash flow can be calculated by the following formula:

$$PV = FV_n \times \frac{1}{(1+r)^n}$$

Where

PV = Present Value

FV_n = Future value at n^{th} year

r = discount rate and

n = number of years after which the future value would be received.

Example: Let us calculate the present value of $10,000 to be received in 9 years when discounted at 11%.

Here,

FV = $10,000;
n = 9 and
r = 11% or 0.11
PV = $10,000 x [1/(1 + 0.11)^9]
=> $3,909.25

Present Value – Multiple Cash Flows

In many cases, especially in Capital Budgeting decisions, we will come across a series of cash flows that would be received in future dates that are different from each other. In such cases, we need to calculate the present value of all such future cash flows discounted with their respective years and discount rate and then add up them together to find out the sum of the present value. It would be then compared with the initial investment required for the project. If the net present value is positive, the project would be considered for acceptance. The formula for calculating the present value of a series of cash flows is:

$$PV = \frac{C_1}{(1+r)1} + \frac{C_2}{(1+r)2} + \ldots\ldots \frac{C_n}{(1+r)n}$$

Where

PV = Sum of all the PV's of future cash inflows
$C_1, C_2 \ldots C_n$ = represents cash inflows in period 1,2 to .... n respectively
r = discount rate and
The above formula will be applied for both even and uneven cash inflow series.

Example: Let us calculate the present value of the following stream of cash inflows, if discounted at 12%.

Year 1 - $5,000; Year 2 - $4,000; Year 3 - $3,000; Year 4 - $2,000 and Year 5 - $1,000. All the cash inflows would be received at the end of the respective years.

Year	Cash inflows	Present Value factor @ 12%	Present value of inflows @ 12%
1	$ 5,000	0.8929	$ 4,464.50
2	$ 4,000	0.7972	$ 3,188.80
3	$ 3,000	0.7118	$ 2,135.40

4	$ 2,000	0.6355	$ 1,271.00
5	$ 1,000	0.5674	$ 567.40
	Total PV		$ 11,627.10

(The PV factors at 12% have been worked out thus: $1/(1 + 0.12)^1 = 0.8929$; $1/(1 + 0.12)^2 = 0.7972$ and so on for 5 years period. These factors will also be provided in the Present value table.)

Thus, the sum of all the present value works out to $11,627.10. If this sum exceeds the initial investment, the project would be considered for acceptance.

PRESENT VALUE OF ANNUITY

The present value of an annuity is the current value of future payments from an annuity, given a specified rate of return or discount rate. The annuity's future cash flows are discounted at the discount rate. Thus, the higher the discount rate, the lower the present value of the annuity.

An annuity is a series of equal annual cash flows. In general terms, the present value of an annuity may be expressed as follows:

P = PMT x ((1 - (1 / (1 + r) ^ n)) / r)

Where:

P = the present value of an annuity stream

PMT = the dollar amount of each annuity payment

r = the interest rate (also known as the discount rate)

n = the number of periods in which payments will be made

The future value of money is calculated using a discount rate. The discount rate refers to an interest rate or an assumed rate of return on other investments. The smallest discount rate used is the risk-free rate of return. This refers to the rate of return available on an investment that is theoretically risk free. U.S. Treasury bonds are generally considered the closest thing to a risk-free investment.

Assume an individual has the opportunity to receive an annuity that pays $50,000 per year for the next 25 years with a 6 percent discount rate or a $650,000 lump-sum payment and needs to determine the more rational option. Using the above formula, the present value of this annuity is:

Present value of annuity = $50,000 x ((1 - (1 / (1 + 0.06) ^ 25)) / 0.06) = $639,168

Example: Let us find out the present value of an annuity of $10,000 to be received in the next 4

years time, the discount rate being 10%.

Years	Cash inflows	PV factor at 10%	PV of cash inflows
1	$10,000	0.9091	$9,091
2	$10,000	0.8264	$8,264
3	$10,000	0.7513	$7,513
4	$10,000	0.6830	$6,830
	Total		$31,698.00

Alternatively, the PV of an annuity can also be calculated by the formula:

UNIT-V
FINANCIAL STATEMENT ANALYSIS

Financial Statement Analysis is a method of reviewing and analyzing a company's accounting reports (financial statements) in order to gauge its past, present or projected future performance. This process of reviewing the financial statements allows for better economic decision making.

Globally, publicly listed companies are required by law to file their financial statements with the relevant authorities. For example, publicly listed firms in America are required to submit their financial statements to the Securities and Exchange Commission (SEC). Firms are also obligated to provide their financial statements in the annual report that they share with their stakeholders. As financial statements are prepared in order to meet requirements, the second step in the process is to analyze them effectively so that future profitability and cash flows can be forecasted.

Therefore, the main purpose of financial statement analysis is to utilize information about the past performance of the company in order to predict how it will fare in the future. Another important purpose of the analysis of financial statements is to identify potential problem areas and troubleshoot those.

USERS OF FINANCIAL STATEMENT ANALYSIS

There are different users of financial statement analysis. These can be classified into internal and external users. Internal users refer to the management of the company who analyzes financial statements in order to make decisions related to the operations of the company. On the other hand, external users do not necessarily belong to the company but still hold some sort of financial interest. These include owners, investors, creditors, government, employees, customers, and the general public. These users are elaborated on below:

1. Management

The managers of the company use their financial statement analysis to make intelligent decisions about their performance. For instance, they may gauge cost per distribution channel, or how much cash they have left, from their accounting reports and make decisions from these analysis results.

2. Owners

Small business owners need financial information from their operations to determine whether the business is profitable. It helps in making decisions like whether to continue operating the business, whether to improve business strategies or whether to give up on the business altogether.

3. Investors

People who have purchased stock or shares in a company need financial information to analyze the way the company is performing. They use financial statement analysis to determine what to do with their investments in the company. So depending on how the company is doing, they will either hold onto their stock, sell it or buy more.

4. Creditors

Creditors are interested in knowing if a company will be able to honor its payments as they become due. They use cash flow analysis of the company's accounting records to measure the company's liquidity, or its ability to make short-term payments.

5. Government

Governing and regulating bodies of the state look at financial statement analysis to determine how the economy is performing in general so they can plan their financial and industrial policies. Tax authorities also analyze a company's statements to calculate the tax burden that the company has to pay.

6. Employees

Employees need to know if their employment is secure and if there is a possibility of a pay raise. They want to be abreast of their company's profitability and stability. Employees may also be interested in knowing the company's financial position to see whether there may be plans for expansion and hence, career prospects for them.

7. Customers

Customers need to know about the ability of the company to service its clients into the future. The need to know about the company's stability of operations is heightened if the customer (i.e. a distributor or procurer of specialized products) is dependent wholly on the company for its supplies.

8. General Public

Anyone in the general public, like students, analysts and researchers, may be interested in using a company's financial statement analysis. They may wish to evaluate the effects of the firm on the environment, or the economy or even the local community. For instance, if the company is running corporate social responsibility programs for improving the community, the public may want to be aware of the future operations of the company.

METHODS OF FINANCIAL STATEMENT ANALYSIS

There are two main methods of analyzing financial statements: horizontal or trend analysis, and vertical analysis. These are explained below along with the advantages and disadvantages of each method.

1.HORIZONTAL ANALYSIS:

Horizontal analysis is the comparison of financial information of a company with historical financial information of the same company over a number of reporting periods. It could also be based on the ratios derived from the financial information over the same time span. The main purpose is to see if the numbers are high or low in comparison to past records, which may be used to investigate any causes for concern. For example, certain expenditures that are high currently, but were well under budget in previous years may cause the management to investigate the cause for the rise in costs; it may be due to switching suppliers or using better quality raw material.

This method of analysis is simply grouping together all information, sorting them by time period: weeks, months or years. The numbers in each period can also be shown as a percentage of the numbers expressed in the baseline (earliest/starting) year. The amount given to the baseline year is usually 100%. This analysis is also called dynamic analysis or trend analysis.

Advantages and Disadvantages of Horizontal Analysis

When the analysis is conducted for all financial statements at the same time, the complete impact of operational activities can be seen on the company's financial condition during the period under review. This is a clear advantage of using horizontal analysis as the company can review its performance in comparison to the previous periods and gauge how it's doing based on past results.

A disadvantage of horizontal analysis is that the aggregated information expressed in the financial statements may have changed over time and therefore will cause variances to creep up when account balances are compared across periods.

Horizontal analysis can also be used to misrepresent results. It can be manipulated to show comparisons across periods which would make the results appear stellar for the company. For instance, if the profits for this month are only compared with those of last month, they may appear outstanding but that may not be the case if compared with the same month the previous year. Using consistent comparison periods can address this problem.

2.VERTICAL ANALYSIS

Vertical analysis is conducted on financial statements for a single time period only. Each item in the statement is shown as a base figure of another item in the statement, for a given time period, usually for year. Typically, this analysis means that every item on an income and loss statement is expressed as a percentage of gross sales, while every item on a balance sheet is expressed as a percentage of total assets held by the firm.

Vertical analysis is also called static analysis because it is carried out for a single time period.

Advantages and Disadvantages of Vertical Analysis

Vertical analysis only requires financial statements for a single reporting period. It is useful for inter-firm or inter-departmental comparisons of performance as one can see relative proportions of account balances, no matter the size of the business or department.

3.RATIO ANALYSIS

Financial Statement Analysis is the process of understanding the fundamentals of the company by reviewing its financial statements namely the Income Statement, Balance Sheet and Cash Flows. Financial Statement Analysis can be performed in a structured way using Ratio Analysis.

Financial Statement Analysis includes comprehensively analyzing the company's liquidity ratios, turnover ratios, profitability ratios, efficiency ratios, dividend ratios, and debt ratios.

Introduction

The term "ratio analysis" refers to the analysis of the financial statements in conjunction with the interpretations of financial results of a particular period of operations, derived with the help of 'ratio'. Ratio analysis is used to determine the financial soundness of a business concern.

Meaning and Definition of Ratio Analysis

Ratio analysis is a conceptual technique which dates back to the inception of accounting, as a concept.

Financial analysis as a scientific tool is used to carry out the calculations in the area of accounting. In order to appraise the valid and existent worth of an enterprise, the financial tool comes handy, regularly. Besides, it also allows the firms to observe the performance spanning across a a long period of time along with the impediments and shortcomings.

Financial analysis is an essential the mechanism for a clear interpretation of financial statements. It aids the process of discovering, the existence of any cross-sectional and time series linkages between various ratios.

Formerly, Security qualified as a major requisite for banks and financial institutions, to consider and grant loans and advances. However, there's been a complete paradigm shift in the structure.

Currently, lending is based on the evaluation of the actual need of the firms. Financial viability of a the proposal, as a base to grant loans, is now been given precedence over security. Further, an element of risk is imperative in every business decision. Credits, run a higher risk, as a part of any decision making in business and so, Ratio analysis and other quantitative techniques mitigate the risk to some the extent by providing a fair and rational assessment of risks.

Ratio analysis broadly explains the process of computing, acts as a vital tool in determination and presentation of the relationship of related items and groups of items of the financial statements.

The financial position of a unit is concretely and clearly encapsulated by the means of ratio analysis. The significance of Ratio Analysis for a holistic Financial Analysis remains unflinchingly supreme.

Ratio can be used in the form of a percentage, Quotient, and Rates. In other words, it can be

expressed as a to b; a: b (a is to b) or as a simple fraction, integer and decimal. A ratio is calculated by dividing one item or figure by another item or figure.

Advantages of Ratio Analysis

In order to establish the relationship between two accounting figures, application of Ratio Analysis is necessary. Application of the same provides significant information to the management or users who can analyze the business situation? It also facilitates meaningful and productive monitoring of the annual performance of the firm. Illustrated below are the advantages of ratio analysis:

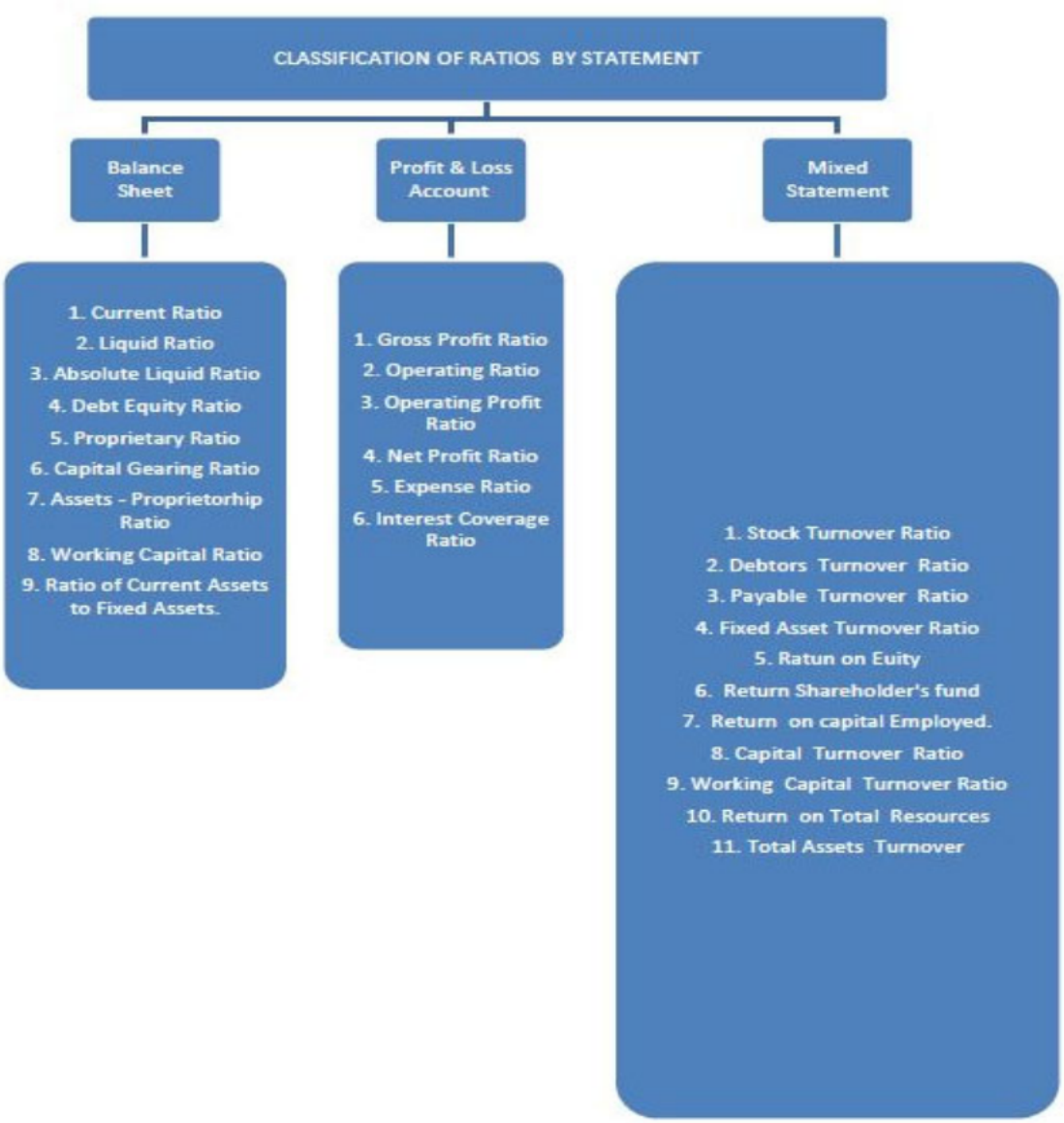
- It facilitates the accounting information to be summarized and simplified in a concise and concrete form which is comprehensible to the user.
- It depicts the inter-relationship between the facts and figures of various segments of business which are instrumental in taking important financial decisions.
- Ratio analysis clears all the impediments and inefficiencies related to performance of the firm/individual.
- It equips the management with the requisite information enables them to take prompt business -decisions.
- It helps the management in effectively discharging its functions/operations such as planning, organizing, controlling, directing and forecasting.
- Ratio analysis provides a detailed account of profitable and unprofitable activities. Thus, the management is able to concentrate on unprofitable activities and consider the necessary steps to overcome the existential shortcomings.
- Ratio analysis is used as a benchmark for effective control of performance of business activities.
- Ratios are an effectual means of communication and informing about financial soundness made by the business concern to the proprietors, investors, creditors and other parties.
- Ratio analysis is an effective tool which is used for measuring the operating results of the enterprises.
- It facilitates control over the operation as well as resources of the business.
- Ratio analysis provides all assistance to the management to discharge responsibilities.
- Ratio analysis aids in accurate determination of the performance of liquidity, profitability and solvency position of the business concern.

Limitations of Ratio Analysis

- Various environmental conditions such as regulation, market structures etc. vary for different companies, operating in different industries. Significance of such factors is extremely high. This variation may lead to a difference or an element of a discrepancy, while comparing the two companies from diverse industries.
- Financial accounting information is impacted and often subject to change, by estimates and assumptions. Accounting standards allow scope for incorporating different accounting policies, which impairs comparability and hence functionality of ratio analysis is less in such situation.
- Ratio analysis explicates association between past information while current and future information is of more relevance and application to the users.

CLASSIFICATION OF RATIOS

Ratios are classified on the basis of the parties of their usage. Accounting ratios are used to indicate the financial position of a firm. Ratios are classified:



1.LIQUIDITY RATIOS

The scope to which there is quick convertibility of assets in to money, for the purpose of paying obligation of short-term nature can be termed as liquidity. Apropos to obtaining an indication of a firm's ability to meet its current liabilities, the utility of the liquidity ratios is instrumental. As a flipside, however, it does not bring to the light, the effectiveness of the optimal management of cash resources. It is also termed as Short-Term Solvency Ratios. To measure the liquidity of a firm, the following

Liquidity ratios are commonly used:

1) Current Ratio:

The relationship between current assets and current liabilities is established by Current Ratios. . It attempts to measure the ability of a firm to meet its current obligations. Current assets and current liabilities comprise of two pivotal components of this ratio. Assets that can be easily converted into cash, within the time frame of less than a year, can be termed as current assets. While, conversely, current liabilities encompass those liabilities which can be paid off with in a year.

Current Ratio = Current Assets / Current Liabilities

The ideal current ratio is 2: 1. It is a stark indication of the financial soundness of a business concern. When Current assets double the current liabilities, it is considered to be satisfactory. Higher value of current ratio indicates more liquid of the firm's ability to pay its current obligation in time.

Advantages of Current Ratio:

- It measures the liquidity of the firm.
- It represents the working capital position of a firm.
- It represents the liquidity of a company.
- It represents margin of safety .
- Its tells us the short term solvency of a firm.

Disadvantages of Current Ratio:

- Its accuracy can be deterred as, pertaining to different businesses, depending on a variant of factors.
- Over-valuation of stock also contributes to its tipping accuracy.
- It measures the firm liquidity on the basis of quantity and not quality, which comes across as a crude method.

2) Quick Ratio or Acid Test Ratio:

The acid test ratio is a stringent and meticulous test of a firm's ability to pay its short-term obligations 'as and when they are due. Quick assets and current liabilities can be associated with the help of Quick Ratio.

The ideal Quick Ratio is 1: 1 and is considered to be appropriate. High Acid Test Ratio is an accurate indication that the firm has relatively better financial position and adequacy to meet its current obligation in time.

Quick Ratio = Liquid Asset (Current Assets – Stock & Prepaid Expenses) / Current Liabilities

Advantages of Quick Ratio:

- It tells us the liquidity position of a firm.
- It is used to remove the errors of current ratio.
- It is used as supplementary to the current ratio.

3. Absolute Liquid Ratio:

The relationship between the absolute liquid assets and current liabilities is established by this ratio. Absolute Liquid Assets take into account cash in hand, cash at bank, and marketable securities or temporary investments. The most favourable and optimum value for this ratio should be 1: 2. It indicates the adequacy of the 50% worth absolute liquid assets to pay the 100% worth current liabilities in time. If the ratio is relatively lower than one, it represents the company's day-to-day cash management in a poor light. If the ratio is considerably more than one, the absolute liquid ratio represents enough funds in the form of cash in order to meet its short-term obligations in time.

Absolute Liquid Ratio = Absolute Liquid Ratio / Current Liabilities

2.PROFITABILITY RATIOS

The capacity of a business concern to earn profit can be termed as profitability. Thus, profit earning can be ascertained on the basis of the volume of profit margin of any activity and is calculated by subtracting costs from the total Revenue accruing to a firm during a particular period. The overall efficiency or performance of a business can be ascertained with the help of profitability ratios. Generally, a large number of ratios can also be put to implementation for determination of the profitability, as the same is in consonance with the sales or investments.

The important profitability ratios are discussed below:

- Gross Profit Ratio
- Operating Ratio
- Operating Profit Ratio
- Net Profit Ratio
- Return on Investment Ratio
- Return on Capital Employed Ratio
- Earning Per Share Ratio
- Dividend Payout Ratio
- Dividend Yield Ratio
- Price Earning Ratio
- Net Profit to Net worth Ratio

1. Gross Profit Ratio

Gross Profit Ratio is the formative component in relationship between gross profit and net sales. Higher Gross Profit Ratio is a precursor to the business concern that the firm has higher profitability. It is also reflective of the standard of performance of firm's business apropos to its effectiveness.

Gross Profit Ratio = Gross Profit / Net Sales X 100

Advantages

- The relationship between gross profit and net sales is adequately ascertained by it
- It reflects the efficiency and productivity of a firm
- This ratio highlights to the management, that a low gross profit ratio can be a precursor to the adverse purchasing and mark-up policies

- A low gross profit ratio also underlines the incapacitated state of the management to increase sales

2. Operating Ratio:

Operating Ratio measures the relationship between total operating expenses and sales. The total operating expenses is the sum total of cost of goods sold, office and administrative expenses and selling and distribution expenses. This ratio equips the firm with the ability to cover total operating expenses.

Operating Ratio = Operating Cost / Net Sales X 100

3. Operating Profit Ratio:

It indicates the operational efficiency of the firm and is a measure of the firm's ability to cover the total operating expenses.

Operating Profit Ratio = Operating Profit / Net Sales X 100

4. Net Profit Ratio

This ratio tells us the overall efficiency in operating the business. It is used to measure the relationship between net profit and sales. It includes non-operating incomes and profits.

Net Profit Ratio = Net Profit after Tax / Net Sales X 100

Advantages

- This is the best yardstick to gauge profitability and liquidity
- It aids in evaluation of overall operational efficiency of the business concern
- It facilitates better decision making ability
- It leverages the process of determination of the managerial efficiency to utilize a firm's resources to generate income on its invested capital
- Net profit Ratio is an indispensable tool of investment evaluation

5. Return On Investment Ratio

This ratio measures a return on owner's or shareholders' investment. It establishes the relationship between net profit after interest and taxes and the owner investment.

Return on Investment Ratio = Net Profit after Interest & Taxes / Shareholder fund or Investment X 100

Advantages

- This ratio indicates the owner's viewpoint pertaining to the success of the business
- It aids in measuring an income on the shareholders' or proprietor's investments
- This ratio equips the management with the important decisions making with respect to the business concern
- It facilitates in efficient handling of owner's investment

6. Return on Capital Employed Ratio

It measures the relationship between profit and capital employed. Return means profits or net profits. Capital employed means total investment made in the business.

Return on Capital Employed = Net Profit after Taxes/ Gross Capital Employed X 100

7. Earning Per Ratio

It measures the earning capacity of the firm from the owners view and helps in determining the price of the equity share in the market.

Earning Per Ratio = Net Profit after Tax and Preference Dividend / No of Equity Share

Advantages

- It measures the price of shares in the market
- It measures the capacity of the firm to pay dividend to its shareholders
- It is used as yardstick to measure the overall performance of the concern

8. Dividend Payout Ratio

It is the relationship between payment of dividend on equity share capital and the profits available after meeting tax and preference dividend. Indication of the dividend policy, as incorporated by the top management is underlined by this ratio. It highlights the utilization of divisible profit to pay dividend or pertaining to the retention of both.

Dividend Payout Ratio = Equity Dividend / Net Profit after Tax & Preference Dividend X 100

9. Dividend Yield Ratio

It is the relationship is established between dividend per share and market value per share. This ratio is a major factor that determines the dividend income from the investor point of view.

Dividend Yield Ratio = Dividend Per Share / Market Value Per Share X 100

10. Price Earning Ratio:

It highlights the earning per share reflected by market share. It establishes the relationship between the market price of an equity share and the earning per equity share. It helps to find out whether the equity shares of a company are undervalued or not. It is also useful in financial forecasting.

Price Earning Ratio = Market Price per Equity Share / Earning Per Share

11. Net Profit to Net Worth Ratio:

It measures the profit return on investment. It indicates the established relationship between net profit and shareholders net worth.

Net Profit to Net Worth Ratio = Net Profit After Taxes / Shareholders Net Worth X 100

Advantages

- It determines the incentive to owners.
- It measures the profit as well as net worth.
- It indicates the overall performance & effectiveness of the firm.

3.SOLVENCY RATIOS

Solvency Ratios are an indication of the financial soundness of a business to continue the operations of its business smoothly, without any impediments and meet its all obligations. Liquidity Ratios and Turnover Ratios concentrate on evaluating the short-term solvency of the concern have already been explained. Now under this part of the chapter only the long-term solvency ratios are dealt with. Some of the important ratios which are given below in order to determine the solvency of the concerned:

- Debt – Equity Ratio
- Proprietary Ratio
- Capital Gearing Ratio
- Debt Service Ratio or Interest Coverage Ratio

1. Debt – Equity Ratio

This ratio is designed to ascertain the firm's obligations to creditors in relation to funds invested by the owners. It is an indication of all external liabilities to owner's recorded claims.

Debt – Equity Ratio = Total Long Term Debts / Shareholders Fund

2. Proprietary Ratio

Proprietary Ratio is also termed as Capital Ratio or Net Worth to Total Asset Ratio. It serves as one of the variant of Debt-Equity Ratio. The term proprietary fund is called Net Worth. The relationship between shareholders' fund and total assets is formed by this ratio.

Proprietary Ratio = Shareholders Fund/ Total Assets

3. Capital Gearing Ratio

This ratio also called as Capitalization or Leverage Ratio. This is one of the Solvency Ratios. The term capital gearing refers to describe the relationship between fixed interest and/or fixed dividend bearing securities and the equity shareholders' fund.

Capital Gearing Ratio = Equity Share Capital / Fixed Interest Bearing Funds

4. Debt Service Ratio or Interest Coverage Ratio

Debt Service Ratio is also termed as Interest Coverage Ratio or Fixed Charges Cover Ratio. This ratio denotes the equation between the amount of net profit before deduction of interest and tax and the fixed interest charges. It is used as a yardstick for the lenders to gain an insight that the business concern will be able to pay its interest periodically.

Debt Service Ratio or Interest Coverage Ratio = Net profit before Interest & Taxes / Fixed Interest Charges

5. OVER ALL PROFITABILITY RATIOS

The overall profitability of a firm on the extent of operating efficiency it enjoys. This ratio establishes the relationship between profitability on sales and the profitability on investment turnover.

Overall Profitability Ratio = Net Profit / Total Assets

The lower a company's solvency ratio, the greater the probability that it will default on its debt.

4.TURNOVER RATIOS

Efficiency Ratios or Performance Ratios or Activity Ratios are the other functional terms coined for Turnover Ratio. Turnover Ratios draw attention to the diverse aspects of a financial statement to meet the requirements of different parties interested in the business. It also underlines the efficiency with which different assets are vitalized in a business. Turnover means the number of times assets are converted or turned over into sales. The activity ratios indicate the rate at which different assets are turned over.

The following activities or turnover ratios can be calculated:

- Inventory Ratios or Stock Turnover Ratios.
- Debtor's Turnover Ratios or Receivable Turnover Ratios.
- Debtor's Collection Period Ratio.
- Creditor's Turnover Ratios or Payable Turnover Ratios.
- Working Capital Turnover Ratios.
- Fixed Assets Turnover Ratios.
- Capital Turnover Ratios.

Inventory Ratio or Stock Turnover Ratios

It is used to measure whether the investment in stock in trade is effectively utilized or not. It reveals the affiliation between sales and cost of goods sold or average inventory at cost price or average inventory at selling price. It indicates the number of times the stock has been turned over in business during a particular period.

Stock Turnover Ratio = Cost of Goods Sold / Average Inventory at Cost

Debtors Turnover Ratios

This ratio indicates the efficiency of the debt collection period and the extent to which the debt have been converted into cash. This ratio is complementary to the Debtor Turnover Ratio. It is very helpful to the management because it represents the average debt collection period

Debtors Turnover Ratio = Net Credit Sales / Average Receivables

Debt Collection Period Ratio

This ratio highlights the competence of the debt collection period and the magnitude to which the debt have been converted into cash. This ratio is corresponding to the Debtor Turnover Ratio. It plays an instrumental to the management because it denotes the average debt collection period.

Debt Collection Period Ratio = Receivables x Months or days in a year / Net Credit Sales for the year

Creditor's Turnover Ratio or Payable Turnover Ratio

Payable Turnover Ratio is also termed as Creditor's T.R or Creditor's Velocity. The credit purchases are recorded in the accounts of the buying companies as Creditors to Accounts Payable.

The Term Accounts Payable or Trade Creditors comprise of sundry creditors and bills payable. This ratio corroborates the relationship between the net credit purchases and the average trade creditors. Creditor's velocity ratio underlines the number of times with which the payment is made to the supplier apropos to credit purchases.

Creditor's Turnover Ratio = Net Credit Purchases / Average Accounts Payable

Working Capital Turnover Ratio

The effective employment of working capital pertaining to sales is indicated by this ratio. This ratio signifies the firm's liquidity position. It institutes relationship between cost of sales and networking capital.

Working Capital Turnover Ratio = Net Sales / Working Capital

Fixed Asset Turnover Ratio

This ratio indicates the efficiency of assets management. Fixed Assets T.R is put to application to gauge the optimum utilization of fixed assets. This ratio forms the liaison between cost of goods sold and total fixed assets. Underutilization of fixed assets is demonstrated, if the ratio is depressed.

Fixed Asset Turnover Ratio = Cost of goods Sold / Total Fixed Assets

Capital Turnover Ratio

This ratio measures the efficiency of capital utilization in the business. It illustrates the relationship between cost of sales or sales and capital employed or shareholders' fund.

Capital Turnover Ratio = Cost of goods Sold / Total Fixed Assets