MBA - I YEAR
DKR14 : ACCOUNTING FOR MANAGERS
SYLLABUS

Unit - I

Accounting Principles – Concepts – Basic of Accounting – Journal – Ledger – Trial Balance – Preparation of Trading and Profit and Loss account and Balance Sheet (problems) – Depreciation methods.

Unit - II

Financial Statement analysis – Objectives – Accounting Ratio's; Liquidity; Profitability, turnover and market test ratios – Problems and computation and interpretation of various accounting ratios.

Unit – III

Fund flow statement analysis sources and applications of funds – Statement of changes in working capital – Computation of fund from operations – Working for computation of various sources and uses – Preparation of fund flow statement – Cash flow statement (Problems) – Distinction between funds flow and cash flow statement.

Unit – IV

Cost Accounting – meaning – Distinction between accounting and cost accounting – Cost terminology; cost, cost centre, cost unit – Elements of cost – Cost Sheet – Problems – Activity Based Costing – Concept – Methodology, applications and uses – Target costing; concept and applications.

Unit – V

Marginal Costing – Definition – Distinction between marginal costing and absorption costing – Decision making under marginal costing system – Contribution, P/V Ratio, limiting factor, Margin of Safety, Break Even Point (problems) - Computation of breakeven point – Break even chart – Uses and limitations of break even chart – Uses and limitation of break even analysis.

Budget, Budgeting and Budgetary Control – Distinction between budgetary control and standard costing – Types of Budgets – Preparation of production, purchases and cash budget – Preparation of flexible budgets (problems) – Zero base budgeting.

References:

1. Advanced Accountancy : R.L.Gupta and Radhasamy
2. Management Accounting : Brown and Howard
3. Management Accounting : Khan and Jain
4. Management Accounting : S.N.Maheswari
5. Management Accounting : Antony and Recace
6. Management Accounting : J.Batty

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Unit - I

Accounting Principles – Concepts – Basic of Accounting – Journal – Ledger – Trial Balance – Preparation of Trading and Profit and Loss account and Balance Sheet (problems) – Depreciation methods.

MANAGEMENT ACCOUNTING

The Institute of Management Accountants (IMA) describes as, “Management accounting is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy”.

Accounting - Meaning and Definition

Accounting is a process of communicating the results of business operations to various parties who are interested or connected with the business, which includes the owners, investors, creditors, Government, bank and other financial institutions etc. Accounting is associated with everybody who is interested to keep the accounts of finance or monetary transactions.

The American Institute of Certified Public Accountants has defined accounting as "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 financial character, and interpreting the results thereof". The above mentioned definition shows the following aspects of accounting.

- Accounting involves both art and science.
- This includes recording, classifying and summarizing of business transactions.
- This records the transactions in terms of money.
- It records the financial things and events only.
- Accounting is the process of interpreting the results of financial operations.
- This communicates the results of analysis and interpretation to the management or to the concerned party.

FUNCTIONS OF FINANCE MANAGER

The functions of Finance Manager are discussed below:

1. Estimating the Amount of Capital Required:

This is the foremost function of the finance manager. Business firms require capital for:

(i) Purchase of fixed assets,

(ii) Meeting working capital requirements, and

(iii) Modernisation and expansion of business.

The financial manager makes estimates of funds required for both short-term and long-term.

2. Determining Capital Structure:

Once the requirement of capital funds has been determined, a decision regarding the kind and proportion of various sources of funds has to be taken. For this, financial manager has to determine the proper mix of equity and debt and short-term and long-term debt ratio. This is done to achieve minimum cost of capital and maximise shareholders wealth.

3. Choice of Sources of Funds:

Before the actual procurement of funds, the finance manager has to decide the sources from which the funds are to be raised. The management can raise finance from various sources like equity shareholders, preference shareholders, debenture-holders, banks and other financial institutions, public deposits, etc.

4. Procurement of Funds:

The financial manager takes steps to procure the funds required for the business. It might require negotiation with creditors and financial institutions, issue of prospectus, etc. The procurement of funds is dependent not only upon cost of raising funds but also on other factors like general market conditions, choice of investors, government policy, etc.

5. Utilisation of Funds:

The funds procured by the financial manager are to be prudently invested in various assets so as to maximise the return on investment: While taking investment

decisions, management should be guided by three important principles, viz., safety, profitability, and liquidity.

6. Disposal of Profits or Surplus:

The financial manager has to decide how much to retain for ploughing back and how much to distribute as dividend to shareholders out of the profits of the company. The factors which influence these decisions include the trend of earnings of the company, the trend of the market price of its shares, the requirements of funds for self- financing the future programmes and so on.

7. Management of Cash:

Management of cash and other current assets is an important task of financial manager. It involves forecasting the cash inflows and outflows to ensure that there is neither shortage nor surplus of cash with the firm. Sufficient funds must be available for purchase of materials, payment of wages and meeting day-to-day expenses.

8. Financial Control:

Evaluation of financial performance is also an important function of financial manager. The overall measure of evaluation is Return on Investment (ROI). The other techniques of financial control and evaluation include budgetary control, cost control, internal audit, break-even analysis and ratio analysis. The financial manager must lay emphasis on financial planning as well.

COMPARISON OF FINANCIAL ACCOUNTING AND COST ACCOUNTING:

1) Financial Accounting protects the interests of the outsiders dealing with the organization, (e.g) shareholders, creditors etc. Whereas reports of Cost Accounting is used for the internal purpose by the management to enable the same in discharging various functions in a proper manner.
2) Maintenance of Financial Accounting records and preparation of financial statements is a legal requirement whereas Cost Accounting is not a legal requirement.
3) Financial Accounting is concerned about the calculation of profits and state of affairs of the organization as whole whereas Cost accounting deals in cost ascertainment and calculation of profitability of the individual products, departments etc.

4) Financial Accounting considers only transactions of historical financial nature whereas Cost Accounting considers not only historical data but also future events.
5) Financial Accounting reports are prepared in the standard formats in accordance with GAAP whereas Cost accounting information is reported in whatever form management wants.

COMPARISON OF FINANCIAL ACCOUNTING AND MANAGEMENT ACCOUNTING:

1) Financial Accounting reports are used by outside parties such as creditors, shareholders, tax authorities etc. whereas Management Accounting reports are used by managers inside the organization for planning, directing, controlling and taking decisions.
2) In Financial Accounting, only historical financial transactions are considered and do not consider non financial transactions whereas in Managerial Accounting emphasis is on decisions affecting the future, thus it may consider future data as well s non financial factors.
3) Maintenance of financial accounting records and preparation of financial statements is a legal requirement whereas Management Accounting is not at all legal requirement. Moreover, these systems have their own reporting formats.
4) In Financial Accounting, precision of information is required whereas in Management Accounting timeliness of information is required.
5) In Financial Accounting, only summarized data is prepared for the entire organization whereas in Management Accounting detailed reports are prepared about products, departments, employees and customer.
6) Preparation of Financial Accounting is based of Generally Accepted Accounting Principles whereas Management Accounting does not follow such principles to prepare reports.
7) Financial reports generated by the Financial Accounting are required to be accurate whereas accuracy is not the prerequisite of management accounting.

COMPARISON OF COST ACCOUNTING AND MANAGEMENT ACCOUNTING:

1) The scope of management accounting is broader than that of cost accounting.
2) Both the accounting streams are not a legal requirement.
3) Cost accounting provides only cost information for managerial use whereas management accounting provides all types of accounting information i.e., cost accounting as well as financial accounting information.
4) In Cost accounting, the main emphasis is on cost ascertainment and cost control whereas in management accounting the main emphasis is on decision-making.
5) The various techniques used by cost accounting are standard costing, budgetary control, marginal costing and cost-volume-profit analysis, uniform costing and inter-firm comparison, etc. whereas management accounting also uses these techniques but also uses techniques like ratio analysis, funds flow statement, statistical analysis etc.
6) Cost Accounting is a part of Management Accounting whereas Management accounting is an extension of managerial aspects of cost accounting with the ultimate intention to protect the interests of the business.

Accounting Principles

Accounting principles are the norms or rule of actions adopted while recording business transactions which will ensure the uniformity, clarity and understanding of business. The accounting principles are mainly classified in to two categories. They are Accounting Concepts and Accounting Conventions.

Accounting Concepts

Accounting concepts are basic assumptions or conditions which the accounting system is based. The important accounting concepts are Business Entity Concept, Going Concern concept, Dual Aspect Concept, Cost Concept, Money measurement Concept, Realization Concept, Accrual Concept and matching Concept.

- **Business Entity Concept:** Business entity concept states that the business and business man are two separate entities. Under this, business is treated as a

separate unit distinct from its owner. The transactions between the proprietor and the business will be recorded separately in the books of business and shown separately under the heading 'Capital account'.

- **Going Concern concept:** As per this concept business unit has a perpetual succession or a continued existence and the transactions are recorded from the point of view. The concept says that the business will continue in operation long enough to charge the cost of fixed assets over the useful life time against the income from business.
- **Dual Aspect Concept:** Under this concept each business transaction has two aspects they are receiving aspects and giving aspects. The receiving aspect is known as Debit aspect and the giving aspect is known as the Credit aspect of the business.
- **Cost Concept:** Cost Concept is based on the Going concern concept. According to this concept, assets purchased will be entered in the business book as per the cost price in which they are purchased and this will be the base for further accounting of assets.
- **Money measurement Concept:** This concept states that, the transactions which will treat only in the terms of money.
- **Realization concept:** According to this Revenue is recognized only when the sale is made.
- **Matching Concept:** This matches the cost along with the revenue.

Accounting Conventions

This is method or custom in which the accountants are following for the preparation of accounting statements. This includes mainly three types of conventions. The important accounting conventions are Convention of conservatism, Convention of consistency and Convention of material Disclosure.

- **Convention of Conservatism: -** As per this concept while accounting one should not anticipate the income but should provide for all possible losses. When there are many alternative values to account an asset then we should choose the lesser

value. Inventory valuation is done as per this concept only, as cost or Market value which ever is lower.

- **Convention of Consistency: -** As per this concept the accounting policies followed in preparation and presentation of financial statements should be consistent from one period to another period. A change in accounting policy can be made only when it is required by law, or for better presentation of accounts or change in accounting standards.
- **Convention of Materiality: -** As per this concept items having significant economic effect on the business of the enterprise should be disclosed in financial statements and any insignificant item which is not relevant to the users should not be disclosed in financial statements.

Classification of Accounts:

Personal Accounts:

These accounts show the transactions with the customers, suppliers, money lenders, the bank and the owner. A business may have many credit transactions with the above persons or organizations. A separate account is to be prepared for each of them. Persons or organizations with whom the business has credit transactions are either debtors or creditors. If they have to give some money to the firm, they are called debtors. Conversely, if the firm is to pay them some money they are known as creditors. The main purpose of preparing personal accounts is to ascertain the balances due to or due from persons or organizations.

Real Accounts:

These accounts are accounts of assets and properties such as land, building, plant, machinery, patent, cash, investment, inventory, etc. When machinery is purchased for cash, the two accounts involved are machinery and cash - both are real accounts. But if the same machine is purchased from Z & Co. on credit, the two accounts involved will be those of machinery and Z & Co., the former being a real account and the later being a personal account.

Nominal Accounts:

These are the accounts of incomes, expenses, gains and losses. Examples of nominal accounts are wages paid, discount allowed or received, purchases, sales, etc. These accounts generally accumulate the data required for the preparation of income statement or trading and profit and loss account.

Rules of Debit and Credit When Accounts are Classified According to Traditional Classification of Accounts:

Personal Accounts:

Debit the account of the person who receives something and credit the account of the person who gives something.

Real Accounts:

Debit the account of the asset/property which comes into the business or addition to an asset, and credit the account which goes out of the business. When furniture is purchased for cash, furniture account is debited (which comes into the business) and cash account is credited (which goes out of the business).

Nominal Accounts:

Debit the accounts of expenses and losses, and credit the accounts of incomes and gains. When wages are paid, wages account is debited (expense) and cash account is credited (asset goes out).

Rules of Debit and Credit at a Glance

Types of Account	Account to be Debited	Account to be credited
Personal account	Receiver	Giver
Real account	What comes in	What goes out
Nominal account	Expense and loss	Income and gain
Valuation account	When account to be decrease	When account to be increase

Journal - The Book of Original Entry:

The word journal has been derived from the French word "Jour" Jour means day. So, journal means daily. Transactions are recorded daily in journal and hence it has named so. As soon as a transaction takes place its debit and credit aspects are

analyzed and first of all recorded chronologically (in the order of their occurrence) in a book together with its short description. This book is known as journal. Since transactions are first of all recorded in journal, so it is called book of original entry or prime entry or primary entry or preliminary entry, or first entry.

Advantages of Journal:

1. Each transaction is recorded as soon as it takes place. So there is no possibility of any transaction being omitted from the books of account.
2. Since the transactions are kept recorded in journal chronologically with narration, it can be easily ascertained when and why a transaction has taken place.
3. For each and every transaction which of the two concerned accounts will be debited and which account credited, are clearly written in journal. So, there is no possibility of committing any mistake in writing the ledger.
4. Since all the details of transactions are recorded in journal, it is not necessary to repeat them in ledger. As a result ledger is kept tidy and brief.
5. Journal shows the complete story of a transaction in one entry.
6. Any mistake in ledger can be easily detected with the help of journal.

Narration:

A short explanation of each transaction is written under each entry which is called narration. The subject matter of the transaction can be ascertained through narration. Besides this, if there be any mistake in determining debit or credit aspect of a transaction, it can be easily detected from narration. "A journal entry is not complete without narration".

Format of Journal:

Date	Particulars	L.F	Amount	Amount
	Account to be debited ....Dr. Account to be credited (Narration)		XXX	 XXX

Rules for Journalizing:

How a transaction is recorded in journal, is discussed below:

Suppose the transaction is: Purchased furniture from ABC on 11.03.08 for Rs.55,000. Here furniture accounting is debited and ABC account is credited.

Date	Particulars	L.F	Amount	Amount
11.03.08	Furniture A/C ....Dr. ABC A/C (Being cost of furniture purchased)		55,000	 55,000

Simple Entry and Compound Entry:

Every transaction effects two accounts - one is debited and another is account is credited. Thus in recording a transaction in a journal one account is debited and another account is credited. This type of entry is called **simple entry**.

The entry in which more than one account is debited or more than one account is credited, is known as compound entry. Three or more accounts are connected with a **compound entry**.

Example of Simple Entry:

For example, on 10.04.15 we bought furniture from XYZ for Rs.40, 000. The entry is:

Date	Particulars	L.F	Amount	Amount
10.04.15	Furniture A/C ....Dr. XYZ A/C (Being furniture purchased on credit)		40,000	 40,000

Example Compound Entry:

For example on 16.05.15 we paid Rs. 6,000 on account of salaries and Rs. 500 on account of rent. For this the entry will be:

Date	Particulars	L.F	Amount	Amount
16.05.15	Salary A/C ....Dr. Rent A/C Cash A/C (Being salaries and rent)		6,000 500	 6,500

Here two accounts have been debited and the entry involves three accounts. Hence, it is a compound entry.

Ledger:

The journal provides a complete listing of the daily transactions of a business. But it does not provide information about a specific account in one place. For example, to know how much cash balance we have, the accounting clerk would have to check the entire journal entries in which cash is involved, and this is very difficult job; because there are hundreds or even thousands of cash transactions recorded on different pages of journal. To avoid this difficulty, the debit and credit of journalized transactions are transferred to ledger accounts. Thus all the changes for a single account are located in one place - in a ledger account. This makes it easy to determine the current balance of any account

Trial Balance:

Trial balance may be defined as an informal accounting schedule or statement that lists the ledger account balances at a point in time compares the total of debit balance with the total of credit balance. The fundamental principle of double entry system is that at any stage, the total of debits must be equal to the total of credits. If entries are recorded and posted correctly, the ledger will reflect equal debits and credits, and the total credit balance will then be equal to the total debit balances.

Illustration: 1

Enter the following transactions in journal and post them into ledgers and prepare Trial Balance:

2005	
Jan. 1	Mr. Anand started business with cash Rs.1,00,000
2	He purchased furniture for Rs.20,000
3	He purchased goods for Rs.60,000
5	He sold goods for cash Rs.80,000
6	He paid salaries Rs.10,000

Solution:

Journal

Date	Particular	L.F	Amount	Amount
2005				
Jan. 1	Cash A/C ....Dr.		1,00,000	
	Anand's Capital A/C			1,00,000
	(Being capital brought in)			
2	Furniture A/C...Dr.		20,000	
	Cash A/C			20,000
	(Being furniture purchased for cash)			
3	Purchases A/C...Dr.		60,000	
	Cash A/C			60,000
	(Goods purchased for cash)			
5	Cash A/C..Dr.		80,000	
	Sales A/C			80,000
	(Sold goods for cash)			
6	Salaries A/C..Dr.		10,000	
	Cash A/C			10,000
	(Salaries paid)			

Ledger Accounts

Cash Account

Date	Particular	Amount	Date	Particulars	Amount
2005			2005		
Jan.1	To Capital A/C	1,00,000	Jan.2	By Furniture A/C	20,000
Jan.5	To Sales A/C	80,000	Jan.3	By Purchases A/C	60,000
			Jan.6	By Salaries A/C	10,000
			Jan.6	By Balance c/d	90,000
	Total	**1,80,000**		**Total**	**1,80,000**
Jan.7	To Balance b/d	90,000			

Anand's Capital Account

Date	Particular	Amount	Date	Particulars	Amount
2005			2005		
Jan.6	To Balance c/d	1,00,000	Jan.1	By Cash A/C	1,00,000
	Total	**1,00,000**		**Total**	**1,00,000**
			Jan.7	By Balance b/d	1,00,000

Furniture Account

Date	Particular	Amount	Date	Particulars	Amount
2005			2005		
Jan.2	To Cash A/C	20,000	Jan.6	By Balance c/d	20,000
	Total	**20,000**		**Total**	**20,000**
Jan.7	To Balance b/d	20,000			

Purchases Account

Date	Particular	Amount	Date	Particulars	Amount
2005			2005		
Jan.3	To Cash A/C	60,000	Jan.6	By Balance c/d	60,000
	Total	**60,000**		**Total**	**60,000**
Jan.7	To Balance b/d	60,000			

Sales Account

Date	Particular	Amount	Date	Particulars	Amount
2005			2005		
Jan.6	To Balance c/d	80,000	Jan.5	By Cash A/C	80,000
	Total	**80,000**		**Total**	**80,000**
			Jan.7	By Balance b/d	80,000

Salaries Account

Date	Particular	Amount	Date	Particulars	Amount
2005			2005		
Jan.6	To Cash A/C	10,000	Jan.6	By Balance c/d	10,000
	Total	**10,000**		**Total**	**10,000**
Jan.7	To Balance b/d	10,000			

Trial Balance

S. No.	Account Name	Debit	Credit
1	Cash Account	90,000	
2	Furniture Account	20,000	
3	Anand's Capital Account		1,00,000
4	Purchases Account	60,000	
5	Sales Account		80,000
6	Salaries Account	10,000	
	Total	**1,80,000**	**1,80,000**

Illustration: 2

The following balances were extracted from the ledgers of a business organization on 31/03/2006. Prepare a Trial Balance as on that date.

	Rs.		Rs.
Drawings	12,000	Capital	48,000
Creditors	86,000	Bills Payable	8,000
Debtors	1,00,000	Bills Receivable	10,400
Loan from Kumar	20,000	Furniture	9,000
Opening Stock	94,000	Cash in hand	1,800
Investment	25,000	Taxes	7,000
Sales	2,56,000	Salaries	19,000
Sales Returns	2,000	Purchase Returns	2,200
Traveling Expenses	9,200	Commission Paid	200
Trading Expenses	5,000	Discount Earned	8,000
Rent	4,000	Bank Overdraft	12,000
Purchases	1,41,600		

Solution:

Trial Balance as on 31st March 2006

Name of the Account	Debit (Rs.)	Credit (Rs.)
Drawings	12,000	
Creditors		86,000
Debtors	1,00,000	
Loan from Kumar		20,000
Opening Stock	94,000	
Investment	25,000	
Sales		2,56,000
Sales Returns	2,000	
Traveling Expenses	9,200	
Trading Expenses	5,000	
Rent	4,000	
Purchases	1,41,600	
Capital		48,000
Bills Payable		8,000
Bills Receivable	10,400	
Furniture	9,000	
Cash in hand	1,800	
Taxes	7,000	

Salaries	19,000	
Purchase Returns		2,200
Commission Paid	200	
Discount Earned		8,000
Bank Overdraft		12,000
	4,40,200	4,40,200

FINAL ACCOUNTS

TRADING ACCOUNT

Trading refers buying and selling of goods. Trading A/c shows the result of buying and selling of goods. This account is prepared to find out the difference between the Selling prices and Cost price. If the selling price exceeds the cost price, it will bring Gross Profit. For example, if the cost price of Rs. 50,000 worth of goods are sold for Rs. 60,000 that will bring in Gross Profit of Rs. 10,000. If the cost price exceeds the selling price, the result will be Gross Loss. For example, if the cost price Rs. 60,000 worth of goods are sold for Rs. 50,000 that will result in Gross Loss of Rs.10, 000. Thus the Gross Profit or Gross Loss is indicated in Trading Account.

Items appearing in the Debit side of Trading Account:

1. Opening Stock: Stock on hand at the commencement of the year or period.
2. Purchases: It indicates total purchases both cash and credit made during the year.
3. Purchases Returns or Returns out words: Purchases Returns must be subtracted from the total purchases to get the net purchases. Net purchases will be shown in the trading account.
4. Direct Expenses on Purchases: Some of the Direct Expenses are.

    i. Wages: It is also known as productive wages or Manufacturing wages.

    ii. Carriage or Carriage Inwards:

    iii. Duty paid on goods for bringing them within municipal limits.

    iv. Customs duty, dock dues, Clearing charges, Import duty etc.

    v. Fuel, Power, Lighting charges related to production.

    vi. Oil, Grease and Waste.

    vii. Packing charges: Such expenses are incurred with a view to put the goods in the saleable condition.

Items appearing on the Credit side of Trading Account:

1. Sales: Total Sales (Including both cash and credit) made during the year.
2. Sales Returns or Return Inwards: Sales Returns must be subtracted from the Total Sales to get Net sales. Net Sales will be shown.

3. Closing stock: Generally, Closing stock does not appear in the Trial Balance. It appears outside the Trial balance. It represents the value of goods at the end of the trading period.

PROFIT AND LOSS ACCOUNT

Trading account reveals Gross Profit or Gross Loss. Gross Profit is transferred to credit side of Profit and Loss A/c. Gross Loss is transferred to debit side of the Profit Loss Account. Thus Profit and Loss A/c is commenced. This Profit & Loss A/c reveals Net Profit or Net loss at a given time of accounting year.

Items appearing on Debit side of the Profit & Loss A/c:

The Expenses incurred in a business is divided in too parts. i.e. one is Direct expenses are recorded in trading A/c., and another one is Indirect expenses, which are recorded on the debit side of Profit & Loss A/c. Indirect Expenses are grouped under four heads:

1. Selling Expenses: All expenses relating to sales such as Carriage outwards, Traveling Expenses, Advertising etc.
2. Office Expenses: Expenses incurred on running an office such as Office Salaries, Rent, Tax, Postage, Stationery etc.,
3. Maintenance Expenses: Maintenance expenses of assets. It includes Repairs and Renewals, Depreciation, etc.
4. Financial Expenses: Interest Paid on loan, Discount allowed etc., are few examples for Financial Expenses.

Item appearing on Credit side of Profit and Loss A/c:

Gross Profit is appeared on the credit side of P & L. A/c. Also other gains and incomes of the business are shown on the credit side. Typical of such gains are items such as Interest received, Rent received, Discounts earned, Commission earned.

MANUFACTURING ACCOUNT

Manufacturing account is an account prepared by manufacturing concerns to ascertain cost of goods manufactured during a period. All the expenses relating to manufacturing activity are debited. The total represents cost of manufactures, which is transferred to trading account.

BALANCE SHEET

Trading A/C and Profit & Loss A/c reveals Gross Profit or Gross Loss and Net Profit or Net Loss respectively, Besides the Proprietor wants

i. To know the total Assets invested in business
ii. To know the Position of owner's equity
iii. To know the liabilities of business.

On the left hand side of this statement, the liabilities and capital are shown. On the right hand side, all the assets are shown. Therefore the two sides of the Balance sheet must always be equal. Capital arrives Assets exceeds the liabilities.

ASSETS:

Assets represent everything which a business owns and has money value. Assets are always shown as debit balance in the ledger. Assets are classified as follows.

1. Tangible Assets:

Assets which can be seen and felt by touch are called Tangible Assets. Tangible Assets are classified into two:

a. Fixed Assets: Assets which are durable in nature and used in business over and again are known as Fixed Assets. e.g. land and Building, Machinery, Trucks, etc.

b. Floating Assets or Current Assets: Current Assets are

i. Meant to be converted into cash,
ii. Meant for resale,
iii. Likely to undergo change e.g. Cash, Balance, stock, Sundry Debtors.

2. Intangible Assets:

Assets which cannot be seen and has no fixed shape. E.g., Goodwill, Patent.

3. Fictitious assets:

Assets which have no real value and will appear on the Assets side of B/S. are known as fictitious assets: e.g. Preliminary expenses, Discount or creditors.

LIABILITIES:

All that the business owes to others are called Liabilities. It also includes Proprietor's Capital.

Classification of Liabilities:

1. Long Term Liabilities:

Liabilities will be redeemed after a long period of time 10 to 15 years e.g. Capital, Long Term Loans.

2. Current Liabilities:

Liabilities, which are redeemed within a year, are called Current Liabilities or short-term liabilities e.g. Trade creditors, B/P, Bank Loan.

3. Contingent Liabilities:

Liabilities, which have the following features, are called contingent liabilities. They are: a. Not actual liability at present. b. Might become a liability in future on condition that the contemplated event occurs. e.g. Liability in respect of pending suit.

TREATMENT OF CERTAIN ITEMS IN FINAL ACCOUNT:-

1. CLOSING STOCK

If it is given in the adjustment it is shown on the credit side of the trading account and also shown on the assets side of the balance sheet. If it is given in the trial balance, it should be shown only in the balance sheet.

2. OUTSTANDING EXPENSES

These are those expenses which remains unpaid at the end of the accounting period. If it is given in the adjustment, it should be added to the concerned expenses on the debit side of the trading account or profit or loss account and it should also be shown in the balance sheet as liability. If it is given in the trial balance, it should be shown in the balance sheet as liabilities.

3. PREPAID EXPENSES

Prepaid expenses are payments made in the current year but related to the next accounting year. Prepaid expenses are also known as expenses paid in advance or unexpired expenses. If it is given in the adjustment, it should deducted from the concerned expenses on the debit side of trading accounting or profit and loss account and it should also be shown on the asset side of balance sheet. If it is given in the trial balance, it should be taken only in the balance sheet as asset

4. ACCRUED INCOME

This is the income earned but not received by the end of the accounting year. This is also known as outstanding incomes. If it is given in the adjustment, it should be added to the concerned income on the credit side of the profit and loss account and it should also be shown on the asset side of balance sheet .If it is given in the trial balance, it should be shown only in the balance sheet on the asset side

5. INCOME RECEIVED IN ADVANCE

It means income which has been received by business before it been earned by the business. It relate to the next accounting period. It is also known as unearned income or income received in advance. If it is given in the adjustment it's should be deducted from the concerned income on the credit side of the profit and loss account and it should also be shown on the liability side of balance sheet. If it is given in the trial balance it should be shown only in the balance sheet on the liability side.

PURPOSE OF FINANCIAL STATEMENTS

The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions. Financial Statements provide useful information to a wide range of users. They are given below.

1. Managers require Financial Statements to manage the affairs of the company by assessing its financial performance and position and taking important business decisions.

2. Shareholders use Financial Statements to assess the risk and return of their investment in the company and take investment decisions based on their analysis.
3. Prospective Investors need Financial Statements to assess the viability of investing in a company. Investors may predict future dividends based on the profits disclosed in the Financial Statements. Furthermore, risks associated with the investment may be gauged from the Financial Statements. For instance, fluctuating profits indicate higher risk. Therefore, Financial Statements provide a basis for the investment decisions of potential investors.
4. Financial Institutions (e.g. banks) use Financial Statements to decide whether to grant a loan or credit to a business. Financial institutions assess the financial health of a business to determine the probability of a bad loan. Any decision to lend must be supported by a sufficient asset base and liquidity.
5. Suppliers need Financial Statements to assess the credit worthiness of a business and ascertain whether to supply goods on credit. Suppliers need to know if they will be repaid. Terms of credit are set according to the assessment of their customers' financial health.
6. Customers use Financial Statements to assess whether a supplier has the resources to ensure the steady supply of goods in the future. This is especially vital where a customer is dependant on a supplier for a specialized component.
7. Employees use Financial Statements for assessing the company's profitability and its consequence on their future remuneration and job security.
8. Competitors compare their performance with rival companies to learn and develop strategies to improve their competitiveness.
9. General Public may be interested in the effects of a company on the economy, environment and the local community.
10. Governments require Financial Statements to determine the correctness of tax declared in the tax returns. Government also keeps track of economic progress through analysis of Financial Statements of businesses from different sectors of the economy.

LIMITATIONS OF FINANCIAL ACCOUNTING:

Financial accounting suffers from the following limitations which have been responsible for the emergence of cost and management accounting:

1. Financial accounting does not provide detailed cost information for different departments, processes, products, jobs in the production divisions. Similarly, separate cost data are not available for different services and functions in the administration division. Management may need information about different products, sales territories and sales activities which are also not available in financial accounting.

2. Financial accounting does not set up a proper system of controlling materials and supplies. Undoubtedly, if material and supplies are not controlled in a manufacturing concern, they will lead to losses on account of misappropriation, mis-utilisation, scrap, defectives, etc. They may, in turn, influence the reported net income of a business enterprise.

3. Recording and accounting for wages and labour is not carried out for different jobs, processes, products, departments. This creates problems in analyzing the cost associated with different activities. This also does not provide a basis for rewarding workers and employees for the above-average performance.

4. It is difficult to know the behaviour of costs in financial accounting as expenses are not assigned to the product at each stage of production. Expenses are not classified into direct and indirect, and therefore, cannot be classified as controllable and uncontrollable. Control of cost which is the most important objective of all business enterprise cannot be achieved with the aid of financial accounting alone.

5. Financial accounting does not possess an adequate system of standards to evaluate the performance of departments and employees working in the departments. Standardisation is now applied to all elements of business. Standards need to be developed for materials, labour and overheads so that a firm can compare the work of labourers, workers, supervisors and executives with what should have been done in an allotted period of time.

6. Financial accounting contains historical cost information which is accumulated at the end of the accounting period. This accounting does not provide day-to-day information about costs and expenses. This is the reason why much

dissatisfaction has been shown with external financial reporting. Historical cost is not a reliable basis for predicting future earnings, solvency, or overall managerial effectiveness. Historical cost information is relevant but not adequate for all purposes. It is now rightly contended that current cost information should be reported along with historical cost information.

7. Financial accounting does not provide information to analyze the losses due to various factors, such as idle plant and equipment, seasonal fluctuations in volume of business, etc. It does not help management in taking important decisions about expansion of business, dropping a product line, starting with a new product, alternative methods of production, improvement in product, etc. Managerial decisions about these business matters have now become vital for the survival and growth of business enterprises.

Illustration: 3

From the information furnished below, prepare a Trading Account for the year ended December 31st 2006.

		Rs.
01	Stock of goods on Jan.1,2006	45,000
02	Purchases during the year	1,05,000
03	Stock of goods on Dec.31,2006	14,000
04	Sales	2,55,000
05	Sales Returns	6,000
06	Carriage Inwards	6,000
07	Import Duty	3,000
08	Octroi	4,000
09	Freight Inwards	8,500
10	Wages	7,000
11	Power	6,000
12	Purchase Returns	8,000
13	Packing Materials	1,200
14	Factory Rent	5,500

Solution:

Trading Account for the year ended 31st December 2006

	Rs.	Rs.			Rs.
To Opening Stock		45,000	By Sales	2,55,000	
To Purchase	1,05,000		(-) Return	6,000	2,49,000
(-) Return	8,000	97,000	By Closing Stock		14,000
To Carriage Inwards		6,000			
To Import Duty		3,000			
To Octroi		4,000			
To Freight Inwards		8,500			
To Wages		7,000			
To Power		6,000			
To Factory Rent		5,500			
To Packing Materials		1,200			
To Gross Profit (Profit and Loss A/C)		79,800			
		2,63,000			2,63,000

Illustration: 4

The following details are extracted from the books of a merchant. Using these details, prepare a Trading and Profit and Loss Account for the year ended March 31st 2007.

	Rs.
Opening Stock on April 1, 2006	99,000
Purchase: Cash	1,99,000
Credit	3,80,000
Purchase Returns	42,000
Sales : Cash	6,00,000
Credit	7,20,000
Returns from Customers	20,000
Sales Tax	65,000
Salaries	2,00,000
Rent and Rates	80,000
Insurance	15,000
Trade expenses	2,000
Advertisement	26,000
Maintenance Expenses	8,000
Commission paid	5,000
Interest earned on Bank balance	2,000
Discount received	5,000
Wages	2,80,000

Given below are the additional information towards the preparation of Trading and Profit and Loss Account.

1. Closing stock as on March 31, 2007: Rs. 1,20,000.
2. Interest on capital and that on drawings amount to Rs. 10,000 and Rs. 6,000 respectively for the year 2006-07.
3. Depreciation on furniture Rs.16,000.
4. Prepaid insurance comes to Rs. 5,000 and unpaid rent Rs. 20,000
5. Write off Rs. 10,000 of bad debts.

Solution:

Trading and Profit and Loss Account for the year ended 31st March 2007

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		99,000	By Sales:		
To Purchase			Cash	6,00,000	
Cash	1,99,000		Credit	7,20,000	
Credit	3,80,000			13,20,000	13,00,000
	5,79,000		By Closing Stock		1,20,000
Less: Purchase Returns	42,000	5,37,000			
To Wages		2,80,000			
To Gross Profit		5,04,000			
		14,20,000			14,20,000
To Sales Tax		65,000	By Gross Profit		5,04,000
To Salaries		2,00,000	By Interest		2,000
To Rent and Rates	80,000		By Discount Received		5,000
Add: Outstanding	20,000	1,00,000	By Interest on Drawings		6,000
To Insurance	15,000				
Less: Prepaid	5,000	10,000			
To Trade Expenses		2,000			
To Advertisement		26,000			
To Maintenance Expenses		8,000			
To Commission		5,000			
To Interest on Capital		10,000			
To Depreciation		16,000			
To Bad Debts		10,000			
To Net Profit (Transferred to Capital A/C)		65,000			
		5,17,000			5,17,000

Illustration: 5

The following is the Trial Balance of ABC Ltd as at March 31st 1997.

	Debit (Rs.)	Credit (Rs.)
Opening Stock on April 1, 1996	70,000	-
Purchase	2,40,000	-
Wages	50,000	-
Discount	5,000	6,000
Salaries	14,000	-
Rent and General Expenses	25,000	-
P&L A/C, 1.4.1996	-	65,000
Dividend Paid	9,000	-
Equity Capital	-	1,00,000
Debtors and Creditors	12,000	11,000
Plant and Machinery	36,000	-
Cash	4,000	-
Reserve	-	15,000
Bad Debts	3,000	-
Sales	-	2,71,000
	4,68,000	4,68,000

You are required to make out the Trading and Profit and Loss Account for the year ended 31.3.1997 and the Balance Sheet as at the date. You are also to make provision in respect of the following.

a. Stock on 31.3.1997, Rs. 86,000
b. Depreciate Plant and Machinery by 10% per annum.
c. Provide 5% as discount on debtors.
d. Provide $2_{1/2}$ % discount on creditors.

Solution:

Trading and Profit and Loss Account of ABC Ltd., for the year ended 31st March 1997

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock To Purchase		70,000 2,40,000	By Sales: By Closing Stock By Gross Loss		2,71,000 86,000 3,000
		3,60,000			3,60,000
To Gross Loss To Salaries		3,000 14,000	By Discount Received By Reserve for Discount on Creditors		6,000 275

To Rent and General Expenses		25,000	By Net Loss		47,925
To Depreciation on Plant and Machinery		3,600			
To Bad Debts		3,000			
To Discount Allowed		5,000			
To Reserve for discount on debtors		600			
		54,200			54,200
To Net Loss		47,925	By Balance b/d (Opening Balance)		65,000
To Dividend Paid		9,000			
To Net Profit		8,075			
		65,000			65,000

Balance Sheet of ABC Ltd, as on 31st March 1997

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Equity Capital		1,00,000	**Fixed Assets**		
Reserves and Surplus			Plant and Machinery	36,000	
Reserves	15,000		Less: Depreciation	3,600	32,400
Add: Retained Profit (as per P&L App. A/C)	8,075	23,075	**Current Assets**		
Current Liabilities			Closing Stock		86,000
Creditors	11,000		Debtors	12,000	
Less: Reserve for Discount	275	10,725	Less: Reserve for Discount	600	11,400
			Cash		4,000
		1,33,800			1,33,800

Illustration: 6

The following balances are extracted from the books of accounts of Mr.Aswin on 31-dec 2011

Purchases	40000	Sales	70185
Purchases return	1410	Stock (1-1-11)	5730
Capital	50500	Drawing	8800
Bad debts	700	Bad debt reserve (1-1-11)	1620
Carriage inwards	1155	Office expenses	670
Postage and stationary	330	Bills Receivable	620
Discount (Cr)	115	Wages	3140

Sales return	2120	Rent received	1050
Building	13000	Cash in hand	1105
Cash at bank	6200	Salary	4500
Office furniture	1800	Postage	410
Commission paid	435	Sundry creditors	9490
Sundry debtors	31035	Sundry expenses	8470
Building (new)	3500	Rates and Insurance	650

Prepare trading and profit and loss account for the year ended 31st Dec. 2011 and prepare balance sheet on that date considering the following:

1) Insurance unexpired Rs 120
2) Provide interest on capital @ 5%
3) Rent not received Rs 100
4) Depreciate on old building @2.5%, new @ 2% and office furniture @ 5%
5) Write off further bad debts Rs 285
6) Increase the provision for bad debts @6% on debtors
7) Salary outstanding Rs 285
8) Stock on 31-12-2009 valued @ Rs 7145

Solution:

Trading & profit and loss account of Mr.Aswin for the year ending 31-dec-2011

Particulars		Amount	Particulars		Amount
To Opening stock		5730	By sales	70185	
To Purchases	40000		Less returns	2120	68065
Less returns	1410	38590	By closing stock		7145
To wages		3140			
To carriage inwards		1155			
To Gross profit		26595			
		75210			**75210**
To salaries	4500		By Gross profit		26595
Add outstanding	285	4785	By discount		115

To rates and insurance	650		Rent	1050	
Less prepaid	120	530	Add outstanding	100	1150
To office expenses		670			
To printing and stationary		330			
To postage		410			
To sundry expenses		8470			
To depreciation Building(old) New Office furniture	 325 70 90	485			
To provision for bad and doubtful debts: Bad debts	 700				
Additional bad debt Add new provision	285 1845				
	2830				
Less existing provision	1620	1210			
To commission		435			
To interest on capital To Net Profit (transferred to Balance Sheet)		2525 8010			
		27860			**27860**

Balance Sheet of Mr.Aswin as on 31-dec-2011

Liabilities		Amount	Assets		Amount
Sundry creditors		9490	Cash in hand		1105
Capital	50500		Cash at bank		6200
Add Net Profit	8010		Bills receivable		620
	58510		Sundry debtors	31035	
Add interest on ca pital	2525		Less bad debts	285	
	61035			30750	
Less drawings	8800	52235	Less new provision	1845	28905
			Closing stock		7145
			Office furniture	1800	

			Less depreciation	90	1710
			Interest accrued Unexpired insurance Buildings: Old New Less total depreciation	 13000 3500 16500 395	100 120 16105
		62010			**62010**

Illustration: 7

From the following Trial balance, extracted from the nooks of Rajiv, prepare a Trading and Profit and Loss Account for the year ended 30th September 2004 and a Balance Sheet as on that date.

Name of the Account	Debit (Rs.)	Credit (Rs.)
Rajiv's Capital Account	-	90,000
Rajiv's Drawing Account	6,480	-
Land and Buildings	25,000	-
Plant and Machinery	14,270	-
Furniture and Fixtures	1,250	-
Carriage Inwards	4,370	-
Wages (Manufacturing)	21,470	-
Bad Debts Reserve (I Oct.2003)	-	2,470
Sales	-	91.230
Sales Return	1,270	-
Bank Charges	140	-
Coal, Gas, Water	720	-
Rates and Taxes	840	-
Discount (Cr)	-	120
Purchases	42,160	-
Purchase Returns	-	8,460
Bills Receivable	1,270	-
Trade Expenses	1,990	-
Sundry Debtors	37,800	-
Sundry Creditors	-	12,170
Stock (1 Oct 2003)	26,420	-
Apprentice Premium	-	500
Fire Insurance	490	-
Cash at Bank	13,000	-
Cash in Hand	850	-
Salaries	4,670	-
	2,04,950	2,04,950

(a) Charge depreciation on Land and Building at $2_{1/2}$%, on Plant and Machinery at 10% and on Furniture and Fixtures at 10%..
(b) Make a reserve of 5% on sundry debtors for bad debts.
(c) Carry forward the following unexpired amounts: Fire insurance Rs.125; Rates and taxes Rs.240; Apprentice premium Rs.400.
(d) Charge 5% interest on capital but not on drawings.
(e) The value of stocks as on 30th Sep.2004 was at Rs.29,390.

Solution:

Trading and Profit and Loss Account for the year ended 30th Sep. 2004

Dr. **Cr.**

	Rs.	Rs.		Rs.	Rs.
To Opening Stock		26,420	By Sales	91,230	
To Purchases	42,160		Less: Sales return	1,760	89,470
Less: Purchase return	8,460	33,700	By Closing Stock		29,390
To Wages		21,470			
To Carriage Inwards		4,370			
To Coal, Gas and Water		720			
To Gross Profit		32,180			
		1,18,860			1,18,860
To Salaries		4,670	By Gross Profit		32,180
To Bank Charges		140	By Discount		120
To Rates and Taxes	840		By Apprentice Premium	500	
Less: Prepaid	(240)	600	(-) Received in Advance	400	100
To Trading Expenses		1,990	By Provision on debts		580
To Fire Insurance (-)	490				
Prepaid	125	365			
To Depreciation on					
Land and Building		625			
Plant and Machinery		1,427			
Furniture and Fixtures		125			
To Provision on Debts					
New Provision (Adj) 37,500 @ 5%					
	1,890				
(+) Bad debts (T/B)	Nil				
(+) Bad debts (Adj	Nil				
	1,890				
(-) Old Prov. (T/B) (To be credited, since the balance is negative)	(2,470)	Nil			
To Interest on Capital 90,000 @ 5%	(580)	4,500			
To Net Profit		18,538			
		32,980			32,980

Balance Sheet as on 30th Sep. 2004

Liabilities	Rs.		Assets		Rs.
Capital	90,000		Cash in hand		850
(+) Net Profit	18,538		Cash at Bank		13,000
(+) Interest on Capital	4,500		Sundry Debtors	37,800	
	1,13,038		(-) New Provision	1,890	35,910
(-) Drawings	6,480	1,06,558	Bills Receivable		1,270
Sundry Creditors		12,170	Closing Stock		29,390
Apprentice Premium Unexpired		400	Prepaid Expenses Fire Insurance		125
			Rates and Taxes		240
			Land and Building	25,000	
			(-) Depreciation	625	24,375
			Plant and Machinery	14,270	
			(-) Depreciation	1,427	12,843
			Furniture and Fixtures	1,250	
			(-) Depreciation	125	1,125
		1,19,128			1,19,128

Illustration: 8

From the following, the balance extracted from the books of Ravi as on 31/12/2009, Prepare Trading and Profit and Loss Account for the year ended December 31st 2009 and a Balance Sheet as on that dates:

Trial Balance

Debit	Rs.	Credit	Rs.
Furniture	640	Capital	12,500
Motor Vehicles	6,250	Provision for Bad Debts	200
Buildings	7,500	Sundry Creditors	2,500
Bad Debts	125	Sales	15,450
Sundry Debts	3800	Bank Overdraft	2,850
Stock (1/1/2009)	3,460	Purchase Return	125
Purchases	5,475	Commission	375
Taxes and Insurance	1,250		
General Expenses	782		
Salaries	3,300		
Sales Return	200		
Advertising	450		
Interest	118		
Cash	650		

Adjusted required:

(a) Stock on hand on 31/12/2009 was Rs. 3,250.
(b) Depreciate building at 5%, furniture at 10% and motor vehicles at 20%.
(c) Rs.85 is due for interest on overdraft.
(d) Salaries Rs. 300 and Taxes Rs.120 are outstanding.
(e) Insurance amounting to Rs. 100 is prepaid.
(f) One-third of the commission received is the respect is the respect of work to be done next year.
(g) Write off a further Rs. 100 as bad debts and provision for bad debts is to be made equal to 5% on sundry debtors.
(h) Purchases include purchase of Furniture Rs.200 on 1/1/2009.

Solution:

Trading and Profit and Loss Account for the year endedn31st December 2009

Dr. Cr.

	Rs.	Rs.			Rs.
To Opening Stock		3,460	By Sales	15,450	
To Purchase	5,475		(-) Return	(200)	
(-) Return	(125)				15,250
(-)Furniture Purchased	(200)	5,150	By Closing Stock		3,250
To Gross Profit		9,890			
		18,500			18,500
To Advertising		450	By Gross Profit		9,890
To Interest	118		By Commission	375	
(+) Interest Due	85	203	(-) Received in		
			Advance (375 x 1/3)	(125)	250
To Taxes and Insurance	1,250				
(+) Outstanding	120				
	1370				
(-) Prepaid	100	1,270			
To general Expenses		782			
To Salaries	3,300				
(+) Outstanding	300	3,600			
To Depreciation					
Building		374			
Furniture		84			
Motor Vehicles		1,250			
To Provision for debts					
New Prov (Adj)					
(3,800 – 100) x 5%	185				
(+) Bad debts(T/B)	125				
(+) Bad debts(Adj)	100				
	410				
(-) Old Prov (T/B)	200				
		210			
To Net Profit		1,916			
		10,140			10,140

Balance sheet as on 31st December 2009

Liabilities	Rs.	Rs.	Asset	Rs.	Rs.
Capital	12,500		Cash		650
(+) Net Profit	1,916	14,416	Sundry Debtors	3,800	
			(-) Bad Debts (Adj)	(100)	
Creditors		2,500	(-) New Prov (Adj)	(185)	3,515
Bank Overdraft	2,850		Closing Stock		3,250
(+) Interest due	85		Prepaid Insurance		100
Outstanding expenses		2,935	Furniture	640	
Salaries		300	(+) Purchased	200	
Taxes		120		840	
Commission Received in advance		125	(-) Depreciation	(84)	756
			Motor Vehicle	6,250	
			(-) Depreciation	(1,250)	5,000
			Building	7,500	
			(-) Depreciation	(375)	7,125
		20,396			20,396

Illustration: 9

Dr. Reddy, after retiring from a Government Pharmaceutical Company, started Reddy Pharma Company in Bangalore on 1st April, 2004 and provides the following balances for the year ending 31st March 2005.

	Debit (Rs.)	Credit (Rs.)
Drawings and Capital	12,000	90,000
Purchases and Sales	4,95,000	6,76,000
Debtors and Creditors	84,000	38,000
Bills receivable and Payable	4,900	3,700
Opening balance	40,000	-
Plant and Machinery	56,000	-
Furniture	8,500	-
Cash at Bank	21,650	-
Building Rent	9,600	-
Salaries	16,910	-
Printing and Postage	3,800	-
Traveling	7,900	-
Other expenses	41,800	-
Insurance	1,040	-
Suspense account	3,000	-
Telephone	1,600	-

Total	8,07,700	8,07,700

Prepare Reddy's Trading, Profit and Loss Account for the year ended 31st March, 2005 and a Balance Sheet as on that date after considering the following.

a. Value of Closing Stock amounted to Rs.50,000

b. Depreciate machinery at 10% p. a. and furniture at 5% p. a.

c. Suspense account includes money advanced to sales manager who was sent to Delhi for business trip. He has spent Rs.900 for miscellaneous expenses. The balance is yet to be refunded by him.

d. The bad debts amounted to Rs.2, 000 and Dr. Reddy has a policy of maintaining 2% of the remaining debtors as provision for future bad debts.

Solution:

Trading and Profit and Loss A/c of Reddy Pharma Company for the year ended March 30, 2005

Dr Cr

Particulars	Amount(Rs.)	Particulars	Amount(Rs.)
To Opening Stock	40,000	By Sales	6,76,000
To Purchases	4,95,000	By Closing Stock	50,000
To Gross Profit (transferred to Profit and Loss A/c)	1,91,000		
	7,26,000		7,26,000
To Building Rent	9,600	By Gross Profit	1,91,000
To Salaries	16,910		
To Printing and Postage	3,800		
To Traveling	7,900		
To Other Expenses	41,800		
To Insurance	1,040		
To Telephone	1,600		
To Miscellaneous Expenses	900		
To Depreciation on:			
Plant and Machinery 5,600			
Furniture 425	6,025		
To Bad Debts 2,000			
Add: Provision 1,640	3,640		
To Net Profit (transferred to Balance Sheet)	97,785		
	1,91,000		1,91,000

Balance Sheet of Reddy Pharma Company as on March 31, 2005

Liabilities		Amount (Rs.)	Assets		Amount (Rs.)
Capital			Plant and Machinery	56,000	
	90,000				
Add: Net profit	97,785		Less: Depreciation	5,600	50,400
			Furniture	8,500	
	1,87,785				
Less: Drawings	12,000	1,75,785	Less: Depreciation	425	8,075
Current Liabilities:			Current Assets:		
Creditors		38,000	Debtors	84,000	
Bills Payable		3,700	Less: Bad Debts	2,000	
Capital				82,000	
			Less: Provision	1,640	80,360
			Bills Receivables		4,900
			Cash at Bank		21,650
			Closing Stock		50,000
			Suspense A/c	3,000	
			Less: Credited to the extent of amount spent	900	2,100
		2,17,485			2,17,485

DEPRECIATION:

Depreciation is that part of the original cost of a fixed asset that is consumed during period of use by the business. The annual charge to profit and loss account/income statement for depreciation is based upon an estimate of how much of the overall economic usefulness of a fixed asset has been used up in that accounting period. It is an expense for services consumed in the same way as expenses are incurred for items such as wages, rent or electricity. Because it is charged as an expense to the profit and loss account/income statement, depreciation reduces net profit.

CAUSES OF DEPRECIATION:

The causes of depreciation can be divided up between physical deterioration, economic factors, the time factor, and depletion. These are briefly explained below:

Physical Deterioration:

Wear and Tear:

When a motor vehicle or machinery or fixtures and fittings are used they eventually wear out. Some last many years, others last only a few year. This is also true of buildings, although some may last for a long time.

Erosion, Rust, Rot and Decay:

Land may be eroded or wasted away by the action of wind, rain, sun and other elements of nature. Similarly, the metals in motor vehicles or machinery will rust away. Wood will not eventually. Decay is a process which will also be present due to the elements of nature and the lack of proper attention.

Economic Factors:

These may be said to be the reasons for an asset being put out of use even though it is in good physical condition. The two main factors are usually obsolescence and inadequacy.

Obsolescence:

This is the process of becoming out of date. For example, over the years there have been great progresses in the development of synthesizers and electronic devices used by leading commercial musicians. The old equipment will therefore have become obsolete, and much of it will have been taken out of use by such musicians.

This does not mean that the equipment is worn out. Other people may buy the old equipment and use it, possibly because they cannot afford to buy new up-to-date equipment.

Inadequacy:

This arises when an asset is no longer used because of the growth and changes in the size of the business. For example, a small ferryboat that is operated by a business at a coastal resort will become entirely inadequate when the resort becomes more popular. Then it will be found that it would be more efficient and economical to operate a large ferryboat, and so the smaller boat will be put out of use by the business. In this case also it does not mean that the ferryboat is no longer in good working order, nor that it is obsolete. It may be sold to a business at a smaller resort.

Methods of Depreciation:

1. Straight line method

Straight line method is also known as fixed installment method and original cost method. This method is very simple and conceptually appropriate to employ. This is one of the most widely used methods for the calculation of depreciation charge. By this method, the number of years of use is estimated and the cost is then divided by the number of years to give the depreciation charge each year. Under this method, the amount of depreciation will be equal each year, since depreciation is charged at fixed rate on cost of asset. This is the special feature of this method. If the annual depreciation is plotted on a graph paper, it will show a straight line, since the amount of depreciation is equal every year. This is why this method is called straight line method.

Formula:

Depreciation = Cost less salvage value / Estimated service life

Illustration: 10

An asset is purchased for Rs. 25,000. Depreciation is to be provided annually according to the Straight Line Method. The useful life of the asset is 10 years and the residual value is Rs.500. You are required to find out (a) Depreciation amount (b) The rate of depreciation and (C) Asset Account for the first three years.

Solution:

(a) Amount of Depreciation

= (Total Cost of Machine – Scrape Value)/Useful Life

= (25,000 – 500)/10 = Rs. 2,450 (p.a)

(b) Rate of Depreciation

= (Depreciation amount x 100)/Total cost of Asset

= (2,450x100)/25,000 = 9.85%

(c) Asset Account

Date	Particulars	Rs.	Date	Particulars	Rs.
Year-I Jan.1	To bank	25,000	Year-I Dec.31	By Depreciation	2,450
			Dec.31	By Balance c/d	22,550
		25,000			25,000
Year-II Jan.1	To Balance b/d	22,550	Year-II Dec.31	By Depreciation	2,450
			Dec.31	By Balance c/d	20,100
		22,550			22,550
Year-III Jan.1	To Balance b/d	20,100	Year-III Dec.31	By Depreciation	2,450
			Dec.31	By Balance c/d	17,650
		20,100			20,100
Year-IV Jan.1	To Balance b/d	17,650			

2. Reducing Balance Method of Depreciation:

Under reducing balance method, the depreciation is charged at a fixed rate like straight line method (also known as fixed installment method). But the rate percent is not calculated on cost of asset as is done under fixed installment method and it is calculated on the book value of asset. The book value of an asset is obtained by deducting depreciation from its cost. The book value of asset gradually reduces on account of charging depreciation. Since the depreciation rate per cent is applied on reducing balance of asset, this method is called reducing balance method or diminishing balance method.

Illustration: 11

A manufacturing concern whose books are closed on 31st December every year, purchased machinery for Rs. 50,000 on 1/1/2000. Additional machinery was acquired for Rs. 10,000 on 1/7/2001 and for Rs.16,061, on 1/1/2004. Certain machinery purchased for Rs.10,000 on 1/1/2000 was sold for Rs. 5,000 on 30/6/2003. Give the Machinery account for 5 years writing off depreciation at 10% p.a. on written down value.

Solution:

Machinery Account

Date	Particulars	Rs.	Date	Particulars	Rs.
2000 Jan.1	To bank (I)	50,000	2000 Dec.31	By Depreciation (I) 50,000x10%x1year	5,000
			Dec.31	By Balance c/d	45,000
		50,000			50,000
2001 Jan.1	To Balance b/d	45,000	2001 Dec.31	By Depreciation (I) 45,000x10%x1year	4,500
July 1	To bank (II)	10,000		(II) 10,000x10%x6/12	500
			Dec.31	By Balance c/d	50,000
		55,000			55,000
2002 Jan.1	To Balance b/d	50,000	2002 Dec.31	By Depreciation (I)40,500x10%x1year	4,050
				(II) 9,500x10%x1year	950
			Dec.31	By Balance c/d	45,000
		50,000			50,000
2003 Jan.1	To Balance b/d	45,000	2003 June 31	By Bank (Sale)	5,000
				By Depreciation 7,290x10%x6/12 (a)	360
				Profit/Loss (Loss on Sale) (a)	1,925
				By Depreciation (I)29,160x10%x1year (b)	2,916
				(II)8,550x10%x1year	855
			Dec.31	By Balance c/d	33,939
		45,000			45,000
2004 Jan.1	To Balance b/d	33,939	2004 Dec.31	By Depreciation 33,939x10%x1year	3,394
				(III) 16,061x10%x1year	1,606
					12,878
	To bank (III)	16,061			
		17,878			17,878
2005 Jan.1		12,878			

Working Note:

(a) Profit or Loss on part of Machine (I) sold on 30/6/2003

	Rs.
Cost price of part machine on 1/1/200	10,000
(-) Depreciation 10,000 x 10% x 1 year	1,000
WDV as 1/1/2001	9,000
(-) Depreciation 9,000 x 10% x 1 year	900
WDV as on 1/1/2002	8,100
(-) Depreciation 8,100 x 10% x 1 year	810
WDV as on 1/1/2003	7,290
(-) Depreciation 7,290 x 10% x 6/12	365
WDV on date of Sale	6,925
(-) Sold for	5,000
Loss on Sale	1,925

(a) WDV of existing Machine (I)

Total WDV as on 1/1/2003	= 36,450
(-) WDV of Sold machine as on 1/1/2003	= 7,290
WDV of existing machine (I)	= 29,160

Illustration: 12

On April 1, 2003, Joy Machine Tools purchased a machinery for Rs.20,000. On 1st October in the same accounting year, additional machinery costing Rs.10,000 was purchased. On 1st October, 2004, the machinery purchased on 1st April, 2003, having become obsolete, was sold off for Rs.9,000. On October 1, 2005, new machinery was purchased for Rs.25,000 while the machinery purchased on 1st October 2003 was sold for Rs.8, 500 on the same day. The firm provides depreciation on it machinery @ 10% per annum on original cost on 31stMarch every year. Show (a) Machinery Account (b) Depreciation Account and (c) Provision for Depreciation Account for the period of three accounting years ending March 3, 2006.

Solution:

Books of Joy Machine Tools

(a) Machinery Account

Date	Particulars	Rs.	Date	Particulars	Rs.
2003			2004		
Apr 1	To Bank (I)	20,000	Mar 31	By Balance c/d	30,000
Oct 1	To Bank (II)	10,000			
		30,000			30,000
2004			2004		
Apr 1	To Balance b/d	30,000	Oct1	By Bank (Sale(I))	9,000
				By Profit &Loss A/c (a)	8,000
			2005	By Provision for depreciation(b)	3,000
			Mar 31	By Balance c/d	10,000
		30,000			30,000
2005			2005		
Apr 1	To Balance b/d	10,000	Oct 1	By Bank (Sale(II))	8,500
Oct 1	To Bank	25,000		By Provision for depreciation (d)	2,000
2006			2006		
Mar 31	To Profit &Loss A/c	500	Mar 31	By Balance c/d	25,000
		35,500			35,500

(b) Depreciation Account

Date	Particulars	Rs.	Date	Particulars	Rs.
2004 Mar 31	To Prov. For Depreciation	2,500	2004 Mar 31	By Profit & Loss A/c	2,500
		2,500			2,500
2004 Oct 1 2005 Mar 31	To Prov. For Depreciation To Prov. For Depreciation	1,000 1,000	2004 2005 Mar 31	By Profit &Loss A/c	2,000
		2,000			2,000
2005 Oct 1 2006 Mar 31	To Prov. For Depreciation To Prov. For Depreciation	5,00 1,250	2006 Mar 31	By Profit &Loss A/c	1,750
		1,750			1,750

(c) Provision for Depreciation Account

Date	Particulars	Rs.	Date	Particulars	Rs.
2004 Mar 31	To Balance c/d	2,500	2004 Mar 31	By Depreciation (2,000 + 500)	2,500
		2,500			2,500
2004 Oct 1 2005 Mar 31	To Machinery A/c (2,000 + 1,000) To Balance c/d	3,000 1,500	2004 Apr 1 Oct 1 2005 Mar 31	By Balance b/d By Depreciation A/c By Depreciation A/c	2,500 1,000 1,000
		4,500			4,500
2005 Oct 1 01. 10. 95 2006 Mar 31	To Machinery A/c (500 + 1,000 + 500) To Balance b/d	2,000 1,250	2005 Apr 1 Oct 1 2006 Mar 31	To Balance b/d By Depreciation A/c By Depreciation A/c	1,500 500 1,250
		3,250	2006		3,250
			Apr 1	By Balance b/d	1,250

Working Note

(a) Profit or Loss on sale of machine on 1.10.2004

	Rs.
Cost price as on 1.4.2003	20,000
(-) Depreciation (20,000 x 10% x 1 year)	2,000
WDV as on 1.4.2004	18,000
(-) Depreciation till date of sale (20,000 x 10% x 6/12)	1,000
WDV as on 1.10.2004	17,000
(-) sold for	9,000
Loss on sale	8,000

(b) Provision for Depreciation on the Machine on the Machine sold on 1.10.2004 = 2,000+ 1,000= 3,000

(c) Profit or Loss on sale of machine on 1.10.2005

	Rs.
Cost price as on 1.10.2003	10,000
(-) Depreciation (10,000 x 10% x 6/12)	500
WDV as on 1.4.2004	9,500
(-) Depreciation (10,000 x 10% x 1 year)	1,000
WDV as on 1.4.2005	8,500
(-) Depreciation till date of sale (20,000 x 10% x 6/12)	500
WDV as on date of sale	8,000
(-) sold for	8,500
Profit on date of sale	500

(d) Provision for Depreciation on the Machine sold on 1.10.2005 = 500+1,000 + 500 = 2,000

Illustration: 13

A manufacturing company purchased on 1st January 2001 a second hand plant for Rs. 30,000 and immediately spent Rs. 20,000 on overhauling it. On 1st July 2001, additional machinery costing Rs.25, 000 was purchased. On 1st July 2003, the plant purchased on 1st January 2001 became obsolete and was sold for Rs. 10,000. On that date a new machine was purchased at a cost of Rs.60,000.

Depreciation was provided for annually on 31st December at the rate of 10% p.a. on the original cost of asset. On 2004, however, the company changed this method of providing depreciation and adopted the method of writing off 15% on diminishing value.

Show the Machinery Account as it would appear in the books of the company for the years 2001 to 2004.

Solution:

Machinery Account

		Rs.			Rs.
2001 Jan 1 July 1	 To Bank (I) (30,000 + 20,000) To Bank (II)	 50,000 25,000	2001 Dec 31	 By Depreciation 50,000 x 10% (I) 25,000 x 10% x 6/12 (II) By Balance c/d	 5,000 1,250 68,750
		75,000			75,000
2002 2001	 To Balance b/d	 68,750	2002 Dec 31	 By Depreciation 50,000 x 10% (I) 25,000 x 10% (II) By Balance c/d	 5,000 2,500 61,250
		68,750			68,750
2003* Jan 1 July 1	 To Balance b/d To Bank (III)	 61,250 60,000	2003* July 1 Dec 31	 By Bank (Sale) (I) By Depreciation 50,000 x 10% x 6/12 By Profit & Loss A/c (Loss) (a) By Depreciation 25,000 x 10% (II) 60,000 x 10% x 6/12 By Balance c/d	 10,000 2,500 27,500 2,500 3,000 75,750
		1,21,250			1,21,250
2004 Jan 1	 By Balance b/d	 75,750	2004 Dec 31	 By Depreciation 75,750 x 15% By Balance c/d	 11,362 64,388
		75,750			75,750

* (Change from SLM – 10% to WDV – 15% from 1.1.2004)

Working Note:

(a) Profit or Loss on sale of machine on 1.7.2003

	Rs.
Cost price as on 1.1.2001	50,000
(-) Depreciation (50,000 x 10%)	5,000
WDV as on 1.1.2002	45,000
(-) Depreciation (50,000 x 10%)	5,000
WDV as on 1.1.2003	40,000
(-) Depreciation till date of sale (50,000 x 10% x 6/12)	2,500
WDV as on date of sale	37,500
(-) sold for	10,000
Loss on sale	27,500

Difference between Straight Line Method and Reducing Balance Method:

Following are the main points of difference between straight line method and reducing balance method of depreciation:

Sl.No.	Straight Line Method	Sl.No.	Reducing Balance Method
1	The rate and amount of depreciation remain the same each year.	1	The rate remains the same, but the amount of depreciation diminishes gradually.
2	Depreciation rate per cent is calculated on cost of assets each year	2	Depreciation rate per cent is calculated on book value of asset.
3	At the end of its life the value of asset is reduced to zero or scrap value.	3	The value of asset is never reduced to zero at the end of its life.
4	The older the asset the larger the cost of its repair. But the amount of depreciation remains the same each year. Hence, the total of depreciation and repairs increases every year. This reduces annual profit gradually.	4	The amount of depreciation decreases gradually, while the cost of repairs increases. So the total of depreciation and repairs remain more or less the same each year. Hence, it causes little or no change in annual profit/loss.
5	Computation of depreciation under straight line method is comparatively easy and simple.	5	Depreciation can be computed without any difficulty, but it is not easy and simple.

3. Sum of the Years' Digits Method of Depreciation:

This method is introduced by American accountants. It is an improvement over diminishing balance method of depreciation. Here also the depreciation charge constantly reduces. Unlike the diminishing balance method, a constantly decreasing rate is applied on the original cost. Hence the original book value is, like straight line method, reducible to zero. The determination of rate of depreciation is very simple. It simply sums up the years in an asset's lifespan to be used as denominator, and reverses the individual year numbers to be used as numerator.

4. Annuity Method of Depreciation:

Under annuity method of depreciation the cost of asset is regarded as investment and interest at fixed rate is calculated thereon. Had the proprietor invested outside the business, an amount equal to the cost of asset, he would have earned some

interest. So as a result of buying the asset the proprietor loses not only cost of asset by using it, but also the above mentioned interest. Hence depreciation is calculated in such a way as will cover both the above mentioned losses. The amount of annual depreciation is determined from annuity table. Annuity method is particularly applicable to those assets whose cost is heavy and life is long and fixed, e.g. leasehold property, land and building etc.

Illustration: 14

A firm purchased a 5 years' lease for Rs.40, 000 on first January. It decides to write off depreciation on the annuity method. Presuming the rate of interest to be 5% per annum. Show the lease account for the first 3 years.

Annuity Table

Amount required to write off Re.1 by the annuity method.

Years	3%	4%	5%
3	0.353530	0.360349	0.367209
4	0.269027	0.275490	0.282012
5	0.218355	0.224627	0.230975
6	0.184598	0.190762	0.197017
7	0.160506	0.166610	0.172820
8	0.142456	0.148528	0.154722

Solution:

According to the annuity table given above, the annual charge for depreciation computation interest at 5 percent p.a. would be:

$$0.230975 \times 40{,}000 = \text{Rs.}9{,}239$$

Lease Account

Date	Debit Side	Rs	Date	Credit Side	Rs
1st Year Jan.1	To Cash	40,000	1st Year Dec.31	By Depreciation	9,239
Dec. 31	To Interest	2,000	Dec.31	By Balance c/d	32,761
		42,000			42,000
2nd Year Jan. 1	To Balance b/d	32,761	2nd Year Dec. 31	By Depreciation	9,239

Dec. 31	To Interest	1,638	Dec. 31	By Balance c/d	25,160
		34,399			34,399
3rd Year Jan.1	To Balance b/d	25,160	2rd Year Dec. 31	By Depreciation	9,239
Dec. 31	To Interest	1,258	Dec. 31	By Balance c/d	17,179
		26,418			26,418
4th Year Jan.1	To Balance b/d	17,179			

5. Depreciation Fund Method or Sinking Fund Method of Depreciation:

Under depreciation fund method or sinking fund method, a fund is created with the amount of annual depreciation. An amount equal to annual depreciation is invested each year in government papers or in some other gilt-edged securities outside the business. The income earned from investment is deposited into the fund and immediately reinvested. This process is carried out throughout the life of the asset and at the end of its life a sum equal to the cost of the asset is accumulated in the fund. Then the whole investment is sold and a new asset is acquired with the sale proceeds. The special feature of this method is that the sum required to buy the new asset is available from depreciation or sinking fund. As a result, the working capital of business is preserved. Sinking fund method is specially applicable to costly machines in large scale industries.

6. Insurance Policy Method of Depreciation:

Insurance policy method of depreciation is somewhat alike the depreciation or sinking fund method. The only difference is that the annual depreciation instead of investing in government papers or gilt-edged securities is paid as premium to an insurance company, who issues an insurance policy equivalent to cost of asset. At the end of the life of asset, insurance company pays money covered by the policy and a new asset is purchased with it.

7. Revaluation Method of Depreciation:

Under revaluation method of depreciation, the assets are revalued each year. The method is normally adapted to charge depreciation on numerous inexpensive

fixed assets like small tools, live stock, patents, copy rights and other assets of such nature which are constantly changing and their period of life is most uncertain. Accordingly periodic inventory is taken of usable items and valued at cost irrespective of ruling prices. Excess of the opening over the closing inventory thus gives the periodic depreciation expenses.

8. Machine Hour Rate Method:

Under machine hour rate method of depreciation, total number of working hours of a machine during the whole of its effective life is estimated, and then the cost of machine is divided by this estimated total number of working hours in order to arrive at the hourly rate which is multiplied by the number of hours the machine has been worked during the year to find out amount of depreciation for the period.

Unit – II

FINANCIAL STATEMENT ANALYSIS

Financial statement analysis is the process of reviewing and analyzing a company's financial statements to make better economic decisions. These statements include the income statement, balance sheet, statement of cash flows, and a statement of changes in equity. Financial statement analysis is a method or process involving specific techniques for evaluating risks, performance, financial health, and future prospects of an organization.

Financial Statement Analysis are given below:

1. Comparative Financial Statements

Comparative financial statements are those statements which have been designed in a way so as to provide time perspective to the consideration of various elements of financial position embodied in such statements. The figures for two or more periods are placed side by side. This facilitates easy and meaningful comparison. Both the income statement and Balance Sheet can be prepared in the form of comparative financial statements.

2. **Common-size analysis** is the restatement of financial statement information in a standardized form.

i) **Horizontal common-size analysis** uses the amounts in accounts in a specified year as the base, and subsequent years' amounts are stated as a percentage of the base value.

- Useful when comparing growth of different accounts over time.
- When viewed graphically, reveals different growth patterns among accounts.

ii) **Vertical common-size analysis** uses the aggregate value in a financial statement for a given year as the base, and each account's amount is restated as a percentage of the aggregate.

- Balance sheet: Aggregate amount is total assets.
- Reveals proportion of asset investment among accounts.
- Reveals capital structure (proportions of capital).
- Income statement: Aggregate amount is revenues or sales.
- Reveals profit margins.

3. **Financial Ratio Analysis:** According to J. Batty, "The term accounting ratios is used to describe significant relationships which exist between figures shown in a balance sheet, in a profit and loss account, in a budgetary control system or in any other part of the accounting organization".

(i) Current ratio:

Current ratio is also known as working capital ratio. It is the ratio of total current assets to total current liabilities. Current assets are those which are usually converted into cash or consumed with in short period (say one year). Current liabilities are required to be paid in short period (say one year).

Current ratio is calculated by using the following formula:
Current ratio = Current assets / current liabilities

(ii) Quick ratio:

Quick ratio is also known as liquid ratio or acid test ratio. Current ratio provides a rough idea of the liquidity of a firm so subsequently a second testing device was developed named as acid test ratio or quick ratio. It establishes relationship between liquid assets and current liabilities. In many businesses a significant proportion of current assets may comprise of inventory. Inventory, by nature, cannot be converted into ready cash abruptly. The term liquid assets does not include inventory.

Following formula is used to calculate quick ratio:

Quick ratio = Liquid (quick) assets / Current Liabilities

The term liquid or quick asset includes all the current assets minus inventory at prepaid expenses.

(iii) Absolute liquid ratio:

Absolute liquid ratio extends the logic further and eliminates accounts receivable (sundry debtors and bills receivables) also. Though receivables are more liquid as comparable to inventory but still there may be doubts considering their time and amount of realization. Therefore, absolute liquidity ratio relates cash, bank and marketable securities to the current liabilities. Since absolute liquidity ratio lays down very strict and exacting standard of liquidity, therefore, acceptable norm of this ratio is 50 percent. It means absolute liquid assets worth one half of the value of current liabilities are sufficient for satisfactory liquid position of a business. However, this ratio is not as popular as the previous two ratios discussed.

Absolute liquid ratio is calculated by using the following formula:

Absolute liquid ratio = Absolute liquid assets / Current liabilities

Where absolute liquid assets = Cash + Bank + marketable securities.

(iv) Inventory turnover ratio:

Inventory turnover ratio or Stock turnover ratio indicates the velocity with which stock of finished goods is sold i.e. replaced. Generally it is expressed as number of times the average stock has been "turned over" or rotates of during the year.

Inventory turnover ratio = Net sales / Average inventory at cost

(v) Debtors turnover ratio:

Ratio of net credit sales to average trade debtors is called debtors turnover ratio. It is also known as receivables turnover ratio. This ratio is expressed in times.

Receivables turnover ratio = Annual net credit sales / Average accounts receivables

Where accounts receivables = Trade debtors + Bills receivables

(vi) Creditors turnover ratio:

It is a ratio of net credit purchases to average trade creditors. Creditors turnover ratio is also know as payables turnover ratio.

Payable turnover ratio = Annual net credit purchases / Average accounts payable

Accounts payable = Trade creditors + Bills payable

(vii) Working capital turnover ratio:

Working capital turnover ratio establishes relationship between cost of sales and net working capital. As working capital has direct and close relationship with cost of goods sold, therefore, the ratio provides useful idea of how efficiently or actively working capital is being used.

Working capital turnover ratio = Cost of sales / Average net working capital

Where, Cost of sales = Opening stock + Net purchases + Direct expends - Closing stock

Net working capital = Current assets - Current liabilities

(viii) Gross profit ratio:

Gross profit ratio is the ratio of gross profit to net sales i.e. sales less sales returns. The ratio thus reflects the margin of profit that a concern is able to earn on its trading and manufacturing activity. It is the most commonly calculated ratio. It is employed for inter-firm and inter-firm comparison of trading results.

Following formula is used to calculated gross profit ratio (GP Ratio):

Gross profit ratio = Gross profit / (Net sales × 100)

Where Gross profit = Net sales - Cost of goods sold

Cost of goods sold = Opening stock + Net purchases + Direct expenses - Closing stock

Net sales = Sales - Returns inwards

(ix) Operating profit ratio:

Operating profit ratio is calculated by dividing the operating net profit by sales. This ratio helps in determining the ability of the management in running the business.

Operating profit ratio = (Operating profit / Net sales) × 100

Operating profit = Gross profit - Operating Expenses

OR

Operating profit = Net sales - Operating cost

OR

Operating profit= Net sales - (Cost of goods sold + Administrative and office expenses + Selling and distribution exp.)

(x) Net profit ratio:

Net profit ratio (NP ratio) expresses the relationship between net profit after taxes and sales. This ratio is a measure of the overall profitability net profit is arrived at after taking into accounts both the operating and non-operating items of incomes and expenses. The ratio indicates what portion of the net sales is left for the owners after all expenses have been met.

Following formula is used to calculate net profit ratio:

Net profit ratio = (Net profit after tax / Net sales) × 100

(xi) Operating Ratio:

The operating ratio is determined by comparing the cost of the goods sold and other operating expenses with net sales.

Following formula is used to calculate operating ratio:

[(Cost of goods sold + Operating expenses / Net sates)] × 100

Here, Cost of goods sold = Operating stock + Net purchases + Manufacturing expenses

– Closing stock

Operating expenses = Office and administrative expenses + Selling and distribution expenses

(xii) Debt-Equity Ratio:

The relationship between borrowed funds and internal owner's funds is measured by Debt-Equity ratio. This ratio is also known as debt to net worth ratio.

The following formulas are used to calculate debt equity ratio:

Debt Equity Ratio = Total long term debts / shareholder' funds

(xiii) Debt Service Ratio or Interest Coverage Ratio:

The ratio measures debts servicing capacity of a business so far as interest on long-term loans is concerned. This ratio shows how many times the interest charges are covered by the earnings. Debt service ratio is also known as interest coverage ratio.

The ratio is calculated with following formula:

Debt service ratio = Earnings before interest and taxes (EBIT) / Fixed interest charges

(xiv) Fixed Assets Ratio:

This ratio establishes the relationship between long term funds (equity plus long-term loans) and fixed assets. Since financial management advocates that fixed assets should be purchased out of long term funds only.

Following formula or equation is used to calculate fixed assets ratio:

Fixed Assets ratio = Net fixed assets / Long term funds

(xv) Debts to Total Funds or Solvency Ratio:

Solvency is the term which is used to describe the financial position of any business which is capable to meet outside obligations in full out of its own assets. So this ratio establishes relationship between total liabilities and total assets.

Debts to Total Funds or Solvency Ratio = Total liabilities / Total assets

(xvi) Reserves to Capital Ratio:

This ratio establishes relationship between reserves and capital.

The ratio is calculated with the help of following formula:

Reserves to capital ratio = Reserves / Capital

4. TREND ANALYSIS:

It is useful for studying financial statements for several years, In Trend Analysis, the profit and loss account and the balance sheet of an accounting year are taken as the base year. Using the previous year’s data of a business enterprise, trend analysis can be done to observe percentage changes over time in selected data. In trend analysis, percentage changes are calculated for several successive years instead of between two years. Trend Analysis is important because, with its long- run view, it may point to basic changes in the nature of the business. By looking at a trend in a particular ratio, one may find whether that ratio is falling, rising or remaining relatively constant. From this observation, a problem is detected or the sign of good management is found.

Trend Analysis uses an index number over a period of time. For index numbers, one year, the base year is equal to 100 per cent. Other years are measured in relation to that amount. For example an analyst may be interested in sales and earnings trends for the past five years. For this purpose, sales and earnings data of a company are given to prepare further the trend analysis or percentages.

ABC Company

Annual performance

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Sales	202.0	215.0	243.0	320.0	415.0
Net Earnings	10.9	11.7	13.5	15.4	18.8

The above data show a fairly healthy growth pattern but the pattern of change from year to year can be determined more precisely by calculating trend percentage. To do this, a base year is selected and then the data are divided for each of the other years by the base year data. The resultant figures are actually indexes of the changes occurring throughout the period. If year '1' is chosen as the base year, all data for year 2 through 5 will be related to year 1, which is represented as 100%.

To create the following table, each year sales is divided from year 2 through years 5 – by Rs.202. the year 1 sales in thousands of rupees. Similarly, the net earnings for years 2 through 5 were divided by Rs.10.9, the year 1 net earnings.

Annual performance (Percentage of Base Year)

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Sales	100	106	120	158	205
Net Earnings	100	107	124	141	172

The trend percentages reveal that the growth in earnings outstripped the growth in sales for years 2 and 3, then fell below the sales growth in the last two years. It is clear in this analysis of comparative statements that a disproportionate increase in operating expenses emerged in year 5. One may analyse the year 4 data to determine if net income was affected for the same reason or if the reduced growth was caused by other factors.

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.

LIMITATIONS OF FINANCIAL STATEMENT ANALYSIS

The limitations of financial statements are those factors that a user should be aware of before relying on them to an excessive extent. Knowledge of these factors could result in a reduction of invested funds in a business, or actions taken to investigate further. The following are all limitations of financial statements:

(i) Dependence on historical costs:

Transactions are initially recorded at their cost. This is a concern when reviewing the balance sheet, where the values of assets and liabilities may change over time. Some items, such as marketable securities, are altered to match changes in their market values, but other items, such as fixed assets, do not change. Thus, the balance sheet could be misleading if a large part of the amount presented is based on historical costs.

(ii) Inflationary effects:

If the inflation rate is relatively high, the amounts associated with assets and liabilities in the balance sheet will appear inordinately low, since they are not being adjusted for inflation. This mostly applies to long-term assets.

(iii) Intangible assets not recorded:

Many intangible assets are not recorded as assets. Instead, any expenditures made to create an intangible asset are immediately charged to expense. This policy can drastically underestimate the value of a business, especially one that has spent a large amount to build up a brand image or to develop new products. It is a particular problem for startup companies that have created intellectual property, but which have so far generated minimal sales.

(iv) Based on specific time period:

A user of financial statements can gain an incorrect view of the financial results or cash flows of a business by only looking at one reporting period. Any one period may vary from the normal operating results of a business, perhaps due to a sudden spike in sales or seasonality effects. It is better to view a large number of consecutive financial statements to gain a better view of ongoing results.

(v) Not always comparable across companies:

If a user wants to compare the results of different companies, their financial statements are not always comparable, because the entities use different accounting practices. These issues can be located by examining the disclosures that accompany the financial statements.

(vi) Subject to fraud:

The management team of a company may deliberately skew the results presented. This situation can arise when there is undue pressure to report excellent results, such as when a bonus plan calls for payouts only if the reported sales level increases. One might suspect the presence of this issue when the reported results spike to a level exceeding the industry norm.

(vii) No discussion of non-financial issues:

The financial statements do not address non-financial issues, such as the environmental attentiveness of a company's operations, or how well it works with the local community. A business reporting excellent financial results might be a failure in these other areas.

(viii) Not verified:

If the financial statements have not been audited, this means that no one has examined the accounting policies, practices, and controls of the issuer to ensure that it has created accurate financial statements. An audit opinion that accompanies the financial statements is evidence of such a review.

(ix) No predictive value:

The information in a set of financial statements provides information about either historical results or the financial status of a business as of a specific date. The statements do not necessarily provide any value in predicting what will happen in the future. For example, a business could report excellent results in one month, and no sales at all in the next month, because a contract on which it was relying has ended.

Illustration: 1

From the following profit and loss account and the Balance Sheet of Sony Ltd. for the year ended 31st December, 2013 and 2014, you are required to prepare a Comparative Income Statement and a Comparative Balance Sheet.

Profit and Loss Account

(In Lakhs of Rs.)

Particulars	2013	2014	Particulars	2013	2014
To cost of goods sold	600	750	By Net Sales	800	1,000
To Operating Expenses:					
Administration	20	20			
Selling	30	40			
To Net Profit	150	190			
	800	1,000		800	1,000

Balance Sheet as on 31st December

(In Lakhs of Rs.)

Liabilities	2013	2014	Assets	2013	2014
Bills Payable	50	75	Cash	100	140
Sundry Creditors	150	200	Debtors	200	300
Tax Payable	100	150	Stock	200	300
6% Debentures	100	150	Land	100	100
6% Preference Share Capital	300	300	Building	300	270
Equity Capital	400	400	Plant	300	270
	200	245	Furniture	100	140
	1,300	1,520		1,300	1,520

Solution:

SONY Ltd. Comparative Income Statement
for the year ended 31st December 2013 and 2014

(In Lakhs of Rs.)

	2013	2014	Absolute Increase or Decrease in 2014	Percentage Increase or Decrease in 2014
Net Sales	800	1,000	+200	+25.00
Less: Cost of goods sold	600	750	+150	+25.00
Gross Profit	200	250	+50	+25.00
Operating Expenses:				
Administration Expenses	20	20	-	-
Selling Expenses	30	40	+10	+33.33
Total Operating Expenses	50	60	10	+20.00
Operating Profit	150	190	+40	+26.67

SONY Ltd. Comparative Balance Sheet
As on 31st December 2013 and 2014

(In Lakhs of Rs.)

Assets	Figures 2013	In Lakhs of Rupees 2014	Absolute increase or decrease during 2014	Percentage Increase or Decrease in 2014
Current Assets:				
Cash	100	140	40	+40%
Debtors	200	300	100	+50%
Stock	200	300	100	+50%
Total Current Assets	500	740	240	+50%
Fixed Assets:				
Land	100	100	-	-
Building	300	300	-30	-10%
Plant	300	300	-30	-10%
Furniture	100	140	+40	+40%
Total Fixed Assets	800	780	-20	-2.5%
Total Assets	1,300	1520	220	+17%
Liabilities of Capital				
Current Liabilities				
Bills payable	50	75	+25	+50%
Sundry Creditors	150	200	+50	+33.33%
Tax Payable	100		+50	+50%
	300		+125	+41.66%
Long-term Liabilities				
6% Debentures	100	150	+50	+50%
	400	575	+175	43.75%
Capital & Reserve				
6% Preference Capital	300	300		-
Equity Capital	400	400	-	-
Reserves	200	245	-	22.5
Total Shareholder's Fund	900	945	45	5%
Total Liabilities and Capital	1,300	1,520	220	17%

Illustration: 2

The summarized Balance Sheets of two companies are as follows:

Summarized Balance Sheet as at 31 March 2007

Liabilities	Tata Ltd.	Wipro Ltd.	Assets	Tata Ltd.	Wipro Ltd.
Equity Share Capital	1,70,000	4,00,000	Fixed Assets	3,45,000	5,10,000
10% Preference Share Capital	1,50,000	1,00,000	Current Assets	2,90,000	3,32,000
Reserve	1,00,000	50,000	Preliminary Expenses	10,500	6,800
15% Debentures	50,000	50,000			
Current Liabilities	1,75,500	2,48,800			
	6,45,500	8,48,800		6,45,500	8,48,800

Revenue Statements for the year ended 31 March 2007

Particulars	Tata Ltd. (Rs.)	Wipro Ltd. (Rs.)
Sales	20,00,000	22,00,000
Less; Cost of Sales	(16,00,000)	(18,00,000)
	4,00,000	4,00,000
Less: Operating Expenses (including interest)	(2,40,000)	(3,05,000)
Less: Non-cash Operating Expenses (depreciation)	(10,000)	(20,000)
Less: Interest	(7,500)	(7,500)
	1,42,500	67,500
Less: Taxes	(50,000)	(25,000)
Less: Dividend	(60,000)	(20,000)
Retained Earnings	32,500	22,500

You are required to prepare the following:
(a) Common Size Income Statement (in vertical form)
(b) Common Size Balance Sheet (in vertical form)

Solution:

Common Size Income Statement for the year ended 31 March 2007

	Particulars	Tata Ltd.	%	Wipro Ltd.	%
1	Sales	20,00,000	100.00	22,00,000	100.00
2	Less; Cost of Sales	(16,00,000)	80.00	(18,00,000)	81.82
3	Gross Profit (1-2)	4,00,000	20.00	4,00,000	18.18
4	Less: Operating Expenses (excluding interest)	2,10,000	12.00	3,05,000	13.86
	Depreciation	10,000	0.50	20,000	0.91
5	Operating Profit (before interest and tax) (3-4)	1,50,000	7.50	75,000	3.41
6	Less: Interest on debentures	7,500	0.375	7,500	0.375
7	Net Profit before tax (5-6)	1,42,500	7.125	67,500	3.07
8	Less: Taxes	50,000	2.500	25,000	1.14
9	Net Profit after tax (7-8)	92,500	4.625	42,500	1.94
10	Less: Dividend	60,000	3.00	20,000	0.91
11	Retained Earnings (9-10)	32,500	1.625	22,500	1.03

Common Size Balance Sheet as at 31 March 2007

No.	Particulars	Tata Ltd.		Wipro Ltd.	
		(Rs.)	**(%)**	**(Rs.)**	**(%)**
	SOURCES OF FUNDS				
1.	Shareholders' Funds				
	A. Share Capital				
	10% Preference Share Capital	1,50,000	32.64	1,00,000	16.86
	Equity Share Capital	1,70,000	37.00	4,00,000	67.43
		3,20,000	69.64	5,00,000	84.29
	B. Add: Reserve	1,00,000	24.42	50,000	8.43
	C. Less: Fictitious Assets (Preliminary Expenses)	(10,500)	(2.29)	(6,800)	(1.15)
		4,09,500	89.12	5,43,200	91.57
2.	Loan Funds				
	15% Debentures	50,000	10.88	50,000	8.43
	Total Funds available (1+2)	4,59,500	100.00	5,93,200	100.00
	APPILICATION OF FUNDS				
1.	Fixed Assets	3,45,000	75.08	5,10,000	85.97
2.	Working Capital				
	A. Current Assets	2,90,000	63.11	3,32,000	55.97
	B. Less: Current Liabilities	1,75,500	38.19	2,48,800	41.94
	(A-B)	1,14,500	24.92	82,200	14.03
	Total funds employed (1+2)	4,59,500	100.00	5,93,200	100.00

Illustration: 3

From the following information regarding current assets and current liabilities of a firm, Calculate the liquidity ratios of the concern:

Current Assets	**Rs.**
Cash	1,00,000
Debtors	50,000
Marketable Securities	50,000
Stock	70,000
Marketable Securities	75,000
Prepaid Expenses	5,000
	3,50,000
Current Liabilities	
Trade Creditors	75,000
Bills Payable	25,000
Outstanding Expenses	15,000
Bank Overdraft	15,000
Provision for Tax	20,000

	1,50,000

Solution:

(i) $\text{Current Ratio} = \dfrac{\text{Current Assets}}{\text{Current Liabilities}}$

$= \dfrac{\text{Rs.}3,50,000}{\text{Rs.}1,50,000}$

$= 2.33:1$

(ii) $\text{Quick Ratio} = \dfrac{\text{Liquid Assets}}{\text{Current Liabilities}}$

$= \dfrac{\text{Rs.}2,75,000}{\text{Rs.}1,50,000}$

$= 1.83:1$

Liquid Assets = Current Assets – Stock – Prepaid Expenses

(iii) $\text{Absolute Quick Ratio} = \dfrac{\text{Absolute Liquid Assets}}{\text{Liquid Liabilities}}$

$\text{Absolute Quick Ratio} = \dfrac{\text{Cash in hand and bank + Marketable securities}}{\text{Current Liabilities – Bank Overdraft}}$

$= \dfrac{\text{Rs.}1,00,000 + \text{Rs.}50,000}{\text{Rs.}1,50,000 - \text{Rs.}15,000}$

$= \dfrac{\text{Rs.}1,50,000}{\text{Rs.}1,35,000}$

$= 1.11:1$

Illustration: 4

XYZ Company's financial statement contains the following information:

Particulars	2002 (Rs.)	2003 (Rs.)
Cash	2,00,000	1,60,000
Sundry Debtors	3,20,000	4,00,000
Temporary Investments	2,00,000	3,20,000
Stock	18,40,000	21,60,000
Prepaid Expenses	28,000	12,000
Total Current Assets	25,88,000	30,52,000
Total Assets	56,00,000	64,00,000
Current Liabilities	6,40,000	8,00,000
Loans	16,00,000	16,00,000
Capital	20,00,000	20,00,000
Retained Earnings	4,68,000	8,12,000

Statement of Profit for the Current Year

Particulars	Rs.
Sales	40,00,000
Less: Cost of Goods Sold	28,00,000
Less: Interest	1,60,000
Net Profit	10,40,000
Less: Taxes @ 50%	5,20,000
Profit after taxes	5,20,000
Profit distributed	2,20,000

From the above, appraise the financial position of the company from the point of view of:

(i) Liquidity, (ii) Profitability, and (iii) Activity.

Solution:

1. Liquidity Ratios:

$$\text{(a) Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$= \frac{\text{Rs.30,52,000}}{\text{Rs.8,00,000}} = 3.81$$

$$\text{(b) Acid test Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

$$= \frac{\text{Rs.}30{,}52{,}000 - 21{,}72{,}000}{\text{Rs.}8{,}00{,}000} = 1.1$$

2. Leverage Ratios:

$$\text{(a) Debt Equity Ratio} = \frac{\text{Long- term debts}}{\text{Equity funds}}$$

$$= \frac{\text{Rs.}16{,}00{,}000}{\text{Rs.}28{,}12{,}000} = 0.57$$

$$\text{(b) Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest Charge}}$$

$$= \frac{\text{Rs.}12{,}00{,}000}{\text{Rs.}1{,}60{,}000} = 7.5 \text{ times.}$$

3. Profitability Ratios:

$$\text{(a) Gross Profit Ratio} = \frac{\text{Gross Profit}}{} \times 100$$

Sales

$$= \frac{Rs.12,00,000}{Rs.40,00,000} \times 100 = 30\%$$

(b) Net Profit Ratio = $\frac{\text{Net Profit}}{\text{Sales}} \times 100$

$$= \frac{Rs.5,20,000}{Rs.40,00,000} \times 100 = 13\%.$$

(c) Return on Total Assets = $\frac{\text{Profit after Tax}}{\text{Total Assets}} \times 100$

$$= \frac{Rs.5,20,000}{Rs.64,00,000} \times 100 = 8.12\%.$$

(d) Return on Capital Employed = $\frac{\text{PAT + Int (1-T)}}{\text{Total Capital Employed}} \times 100$

$$= \frac{Rs.5,20,000 + 80,000}{} \times 100 = 13.6\%.$$

Rs.44, 12,000

$$\text{(e) Return on Equity Funds} = \frac{\text{Profit after Tax}}{\text{Equity Funds}} \times 100$$

$$= \frac{\text{Rs.5, 20,000}}{\text{Rs.28, 12,000}} \times 100 = 18.5\%.$$

4. Activity Ratios:

$$\text{(a) Debtors Turnover} = \frac{\text{Sales}}{\text{Average Debtors}}$$

$$= \frac{\text{Rs.40, 00,000}}{\text{Rs.3, 60,000}} = 11.1 \text{ times}$$

$$\text{(b) Stock Turnover} = \frac{\text{Cost of goods sold}}{\text{Average Stock}}$$

$$= \frac{\text{Rs.28, 00,000}}{\text{Rs.20, 00,000}} = 1.4 \text{ times}$$

$$\text{(c) Total Assets Turnover} = \frac{\text{Sales}}{\text{Average Assets}}$$

$$= \frac{\text{Rs.40,00,000}}{} = 0.67 \text{ times}$$

Rs.60,00,000

On the basis of the above ratios, it can be said that the firm's position is sound from the point of view of liquidity, solvency and profitability. However, its activity, ratios do not represent a satisfactory position. Better position will be reflected only if the ratios are compared with the performance of other firms in the same industry.

Unit – III

FUNDS FLOW STATEMENT:

Meaning of Funds:

The term funds have been defined in a number of ways depending on the user's purpose. In a narrow sense, it means cash resource of the business. In a broader sense, it means all financial resources of the business. Here funds refer to money values in whatever form it may exit. In a popular sense, the term funds means working capital i.e. the excess of current assets over current liabilities. In fact, there are two concepts of working capital, gross capital of working capital and the net capital of working capital. Gross capital of working capital refers to the entire investment in current assets. Net capital of working capital means the excess of current assets over current liabilities or total current assets less current liabilities. We use it here in the sense of net working capital.

Meaning of Flow of Funds:

The term flow means change or movement. Therefore, the flow of funds means "Changes in Funds" or changes in working in working capital or movement in the working capital. In business, several transactions are taking place every day. Some of these transactions may increase the funds and some of these transactions may decrease the funds. And some transactions may not result in the change in the funds position. In case if a transaction results in increase of funds it will be called a 'source of funds' and if a transaction results in decrease of funds, it will be called an 'application of funds'. In case if a transaction does not make any change in the funds position, then it is called a 'non-fund transaction'.

To understand which transactions increase the funds position or which transactions decrease the funds position or which transactions do not cause change in funds position you should know the meaning of current assets, current liabilities, non-current assets and non- current liabilities.

Current Assets and Current Liabilities:

The term current assets include the assets which are acquired with the intention of converting them into cash within a year or within the normal operating cycle of the business. Current assets include: cash in hand, cash at bank. Stock - in- trade or inventories, prepaid expenses, debtors, bills receivable, short – term investments etc. ‘Current liabilities’ mean those liabilities which are expected to be paid in the near future, that is, within a period of one year or within the normal operating cycle of the business. Current liabilities include: sundry creditors, bills payable, accrued or outstanding expenses, band overdraft, short- term loans, dividends payable, provision against current assets(like provision for doubtful debts, provision for discount on debtors etc.) tax payable, etc. An amount which is due within a year does not make it a current liability unless it is payable out of existing current assets or by creation of new current liabilities.

Non- Current Assets and Non- Current Liabilities:

Non- Current Assets:

All assets other than the current assets can be termed as non- current assets. Non- current assets include: Land and buildings, plant and machinery, furniture, loose tools, goodwill, patents, copyrights, long- term investment in shares of other companies, Government bonds etc.

Non- Current Liabilities:

Non-Current liabilities are those liabilities which are not included under current liabilities. They include: share capital, debentures, long- term loans, share premium, credit balance in the profit and loss account, revenue and capital reserves (such as general reserve, dividend equalization fund, capital redemption reserve) etc.

Identification of transactions which cause flow of funds:

In order to prepare funds flow statement it is essential to identify which transactions result in flow of funds (or change in working capital) and which transactions do not result in flow of funds (or change in working capital). The following guidelines may be adopted for identification purpose.

a) **Transactions among current accounts do not affect flow of funds:**

Transactions involving two current assets do not affect funds.

Transactions involving two current liabilities do not affect funds.

Transactions involving current assets and current liabilities do not affect funds.

You can understand better the above points with the help of following examples.

A company realizes Rs.45,000 from its debtors. This transaction will reduce the debtors by Rs.45,000 but at the same time the cash balance of the company will increase by Rs.45,000.Therefore the total of current assets will continue at the old figure. This means, a transaction involving two current assets does not affect funds or change working capital position of the company. Similarly, a transaction involving a current asset and current liability does not affect funds. Suppose, if a company pays Rs.30,000 to its creditors out of its cash balance, the total of current assets will be reduced by Rs.30,000 and the total current liabilities will be reduced by Rs.30,000. Therefore, there will not be any change in the working capital.

b) Transactions among non-current accounts do not affect flow of funds:

Transactions involving two non-current (or fixed) assets do not affect funds.

Transactions involving two long term liabilities do not affect funds.

Transactions involving non-current assets and long term liabilities do not affect funds.

Suppose, if a company purchases furniture for Rs.25,000 by raising long term loans of Rs.25,000, this transaction will not have any impact on working capital position. The reason is furniture (a non- current asset) and long term loan (a non – current liability) is not the constituents of the working capital. Similarly, if the company redeems its preference shares by issuing debentures, this transaction will not result in any change in working capital position of the company as both the two accounts involved in the transaction are not the constituents of the working capital.

c) Transactions between current account and non-current accounts affect funds:

Funds move when there is a cross transaction between a non- current to current account and vice- versa. The details are given below:

Transactions involving a current asset and fixed assets affect funds.

Transactions involving a current liability and a fixed asset affect funds.

Transactions involving a current asset and a fixed liability affect funds.

Transactions involving a current liability and a fixed liability affect funds.

Look at the following example and see how the transaction between a current account and a non- current account affects working capital position of the company. A company raises Rs.60,000 in cash by issue of shares. Due to this transaction the cash position of the company will raise by Rs.60,000. As there is no change in the current liabilities position the working capital of the company will increase by Rs.60,000. Similarly, transactions of sale of fixed assets, repayment of long- term liabilities by cash of by creating current liabilities will affect the working capital position of the company. You have learnt that the cross transaction affect the funds or working capital position of a company. Now we can discuss the procedures or steps procedures or steps involved in the preparation of funds flow statement.

FUNDS FLOW STATEMENT:

Funds flow statement is a statement which discloses the analytical information about the different sources of a fund and the application of the same in an accounting cycle. It deals with the transactions which change either the amount of current assets and current liabilities (in the form of decrease or increase in working capital) or fixed assets, long-term loans including ownership fund.

Steps in the preparation of funds flow statement

Funds flow statement is a statement showing sources and applications of funds for a period of time. As you know, the term 'funds' is interpreted to mean net working capital. As net working capital is the excess of current assets over current liabilities, funds represent the position of current assets which is financed from the long- term / non-current source. Fund flow analysis /statement helps to know where the increased working capital is applied if it has increased, and from where funds have been released if it has decreased. Funds flow statement is also called the statement of sources and applications of funds or movement of funds statement.

As already stated, there are three steps in the preparation of funds flow statement.

i) Preparation of schedule of changes in working capital to ascertain increase or decrease in working capital.
ii) Calculation of funds from operations.
iii) Preparation of funds flow statement.

Preparation of schedule of changes in working capital

The schedule of changes in working capital is prepared to know the changes in working capital between two balance sheet dates. This statement is prepared with the current items of balance sheet i.e., current assets and current liabilities. Non- current items are ignored as working capital is defined as the excess of current assets over current liabilities.

A typical form of schedule of changes in working capital is as follows:

The changes in the current assets or current liabilities in the current year's balance sheet as compared to that of the previous year's balance sheet either results in increase or decrease in working capital. The following rules can be followed in order to ascertain whether there is an increase in working capital or decrease in working capital.

i) Increase in current asset, results in increase (+) in 'working capital'.
ii) Decrease in current asset, results in decrease (-) in 'working capital'.
iii) Increase in current liability, results in decrease (-) in 'working capital'.
iv) Increase in current liability, results in increase (+) in 'working capital'.

Statement of Changes in Working Capital - Format

Particulars	Previous Year	Current Year	Effect on Working Capital	
			Increase	Decrease
Current Assets				
Stock				
Debtors				
Cash in hand				
Cash at bank				
Bill Receivables				
Prepaid Expenses				
Short- term / Temporary investment				
Total Current Assets				
Current Liabilities				
Sundry Creditors				
Bill Payables				
Bank Overdraft				
Outstanding Expenses				
Dividends Payable				
Proposed Divided				

Provision for Taxation			
Total Current Liabilities			

Illustration:1

The balance sheets of Kanya Ltd., at the end of 2013 and2014 are given below. You are required to prepare schedule of changes in working capital

Liabilities	2013	2014	Assets	2013	2014
	Rs.	**Rs.**		**Rs.**	**Rs.**
Share Capital	1,00,000	1,50,000	Land	1,00,000	1,00,000
Share Premium	-	5,000	Plant at cost	1,04,000	1,00,000
General Reserve	50,000	60,000	Furniture at cost	7,000	9,000
P& L A/C	10,000	17,000	Investment at Cost	60,000	80,000
8% Debentures	70,000	50,000	Debtors	30,000	70,000
			Stock	60,000	65,000
Depreciation on plant	50,000	56,000	Cash	30,000	45,000
Provision for dep. on Furniture	5,000	6,000			
Provision for Creditors	20,000 86,000	30,000 95,000			
	3,91,000	4,69,000		3,91,000	4,69,000

Solution:

Schedule /Statement of Changes in Working Capital

Particulars 2013-2014 Changes in Working Capital

Particulars	2013 (Rs.)	2014 (Rs.)	Changes in Working Capital	
			Increase	**Decrease**
Current Assets:				
Debtors	30,000	70,000	40,000	-
Stock	60,000	65,000	5,000	-
Cash	30,000	45,000	15,000	-
Total (A)	1,20,000	1,80,000		
Current Liabilities:				
Creditors	86,000	95,000	-	9,000
Total (B)	86,000	95,000		
Working Capital	34,000	85,000		
Net increase in Working Capital	51,000			51,000
	85,000	85,000	60,000	60,000

Note: Provision for taxation is treated as a non-current liability and investments are taken as non-current assets.

Illustration: 2

Prepare a Schedule of change in Working Capital of XYZ Limited from the following information:

Liabilities	As on 31.12.05 Amt.(Rs.)	As on 31.12.06 Amt.(Rs.)	Assets	As on 31.12.05 Amt.(Rs.)	As on 31.12.06 Amt.(Rs.)
Equity share capital	5,50,000	6,50,000	Fixed Assets	6,00,000	7,50,000
Debentures	1,00,000	55,000	Long Term Investment	1,35,000	1,05,000
Long term loan	1,00,000	2,00,000	Bill Receivables	55,000	70,000
Tax payable	55,000	25,000	Sundry Debtors	70,000	75,000
Accounts payable	90,000	70,000	Inventory	45,000	40,000
Outstanding Expenses	20,000	25,000	Prepaid Expenses	5,000	---------
Bank overdraft	18,000	15,000	Cash and Bank Balance	20,000	10,000
Dividend payable	17,000	10,000			
	9,50,000	10,50,000		9,50,000	10,50,000

Solution:

Particulars	As on 31.12.05 Amt.(Rs.)	As on 31.12.05 Amt.(Rs.)	Effect on working Capital Increase (+) Rs.	Decrease (-) Rs.
Current Assets:				
Cash and Bank Balance	20,000	10,000	----------	10,000
Bill Receivable	55,000	70,000	15,000	---------
Sundry Debtors	70,000	75,000	5,000	---------
Inventory	45,000	40,000		5,000
Prepaid Expenses	5,000	--------		5,000
Total Current Assets(A)	1,95,000	1,95,000		
Current Liabilities:				
Tax payable	55,000	25,000	30,000	
Accounts payable	90,000	70,000	20,000	
Outstanding Expenses	20,000	25,000		5,000
Bank overdraft	18,000	15,000	3,000	
Dividend payable	17,000	10,000	7,000	-----
Total Current Liabilities (B)	2,00,000	1,45,000		
Working Capital : (A – B)	5,000	50,000		
Net Increase in Working Capital	55,000	-------		55,000
	50,000	50,000	80,000	80,000

Illustration: 3

From the following Balance Sheet of TATA Ltd. On 31st December, 1985 and 1986, you are required to prepare.

(a) A Schedule of Changes in Working Capital.

(b) A Funds Flow Statement.

Liabilities	1985 Rs.	1986 Rs.	Assets	1985 Rs.	1986 Rs.
Share Capital	1,00,000	1,00,000	Goodwill	12,000	12,000
General Reserve	14,000	18,000	Building	40,000	36,000
Profit & Loss A/C	16,000	13,000	Plant	37,000	36,000
Sundry Creditors	8,000	5,400	Investments	10,000	11,000
Bills Payable	1,200	800	Stock	30,000	23,4000
Provision for Taxation	16,000	18,000	Bills Receivable	2,000	3,200
Provision for Doubtful Debts	400	600	Debtors	18,000	19,000
			Cash at Bank	6,600	15,200
	1,55,600	1,55,800		1,55,600	1,55,800

The following additional information has also been given:

(i) Depreciation charged on Plant was Rs.4,000 and on Building Rs.4,000.

(ii) Provision for Taxation of Rs.19,000 was made during the year 1986.

(iii) Interim Dividend of Rs.8,000 was paid during the year 1986.

Solution:

SCHEDULE OF CHANGES IN WORKING CAPITAL

Particulars	1985 Rs.	1986 Rs.	Increase (+) Rs.	Decrease (-) Rs.
Current Assets:				
Cash at Bank	6,600	15,200	8,600	
Debtors	18,000	19,000	1,000	
Bills Receivable	2,000	3,200	1,200	
Stock	30,000	23,400		6,600
Current Liabilities:				
Provision for Doubtful Debts	400	600		200
Bills Payable	1,200	800	400	
Sundry Creditors	8,000	5,400	2,600	
Total			13,800	6,800
Net Increase in Working Capital			7,000	

FUNDS FLOW STATEMENT

Particulars		Rs.
Sources:		
Funds from Operations		36,000
	Total Sources	36,000
Applications:		
Purchase of Plant		3,000
Tax paid		17,000
Investment purchased		1,000
Interim Dividend paid		8,000
	Total Applications	29,000
Net Increase in Working Capital		7,000

Working Notes:

1. **Funds from Operations:**

Particulars	Rs.	Rs.
Profit & Loss Account Balance on 31st Dec.1986		13,000
Add: Items which do not decrease Funds from Operations:		
Transfer to General Reserve	4,000	
Provision for Tax	19,000	
Depreciation:		
Plant	4,000	
Building	4,000	
Interim Dividend paid	8,000	39,000
		52,000
Less: Profit & Loss Account Balance on 31st Dec.1985		16,000
Funds from Operations for the year		36,000

2. **Purchase of Plant.** This has been found out by preparing the Plant Account.

PLANT ACCOUNT

Particulars	Rs.	Particulars	Rs.
To Balance b/d	37,000	By Depreciation	4,000
To Bank (purchase of plant – balancing figure)	3,000	By Balance c/d	36,000
	40,000		40,000

3. Tax paid during the year has been found by preparing a Provision for Tax Account.

PROVISION FOR TAX ACCOUNT

Particulars	Rs.	Particulars	Rs.
To Bank (being tax paid – balancing figure)	17,000	By Balance b/d	16,000
To Balance c/d	18,000	By P & L A/C	19,000
	35,000		35,000

4. ‘Investments’ have been taken as a fixed asset presuming that they are long-term investments.

Illustration: 4

From the following balance sheets of Sohan Ltd., prepare a statement of changes in Working Capital and Funds Flow Statement.

Particulars	2007 (Rs.)	2008 (Rs.)
Capital and Liabilities:		
Equity Share Capital	7,00,000	8,00,000
8% Redeemable preferences shares	2,50,000	2,00,000
Capital Reserve	------------	20,000
General Reserve	50,000	60,000
Profit and Loss Account	30,000	48,000
Proposed dividends	42,000	50,000
Sundry Creditors	45,000	55,000
Bills Payable	25,000	36,000
Liability for Expenses	15,000	12,000
Provision for taxation	40,000	50,000
	11,97,000	13,31,000
Assets:		
Goodwill	1,00,000	90,000
Land and Buildings	3,00,000	2,70,000
Plant and Machinery	1,80,000	2,00,000
Investment	30,000	90,000
Sundry Debtors	1,40,000	1,70,000
Stock	77,000	1,09,000
Bills Receivables	20,000	44,000
Cash in Hand	3,15,000	3,20,000
Cash at Bank	10,000	18,000
Preliminary Expenses	25,000	20,000
	11,97,000	13,31,000

1. A piece of land been sold out in 2008 and the profit on sale was credited to capital reserve.

2. A machine was sold for Rs. 10,000. The written down value of the machine was Rs. 12,000.Depreciation of Rs.10,000 was charged on plant account in 2008.

3. The investments are trade investments.Rs.3,000 is received by way of dividends which included Rs.1,000 from pre-acquisition profit. It has been credited to investment account.

4. An interim dividend of Rs.20,000 has been paid in 2008.

Solution:

Statement of Changes in Working Capital

Particulars	At the end of December 31		Effect on Working Capital (Rs.)	
	2007 (Rs.)	2008 (Rs.)	Increase (Rs.)	Decrease (Rs.)
Current Assets:				
Sundry debtors	1,40,000	1,70,000	30,000	-----------
Stock	77,000	1,09,000	32,000	------------
Bill receivables	20,000	44,000	24,000	-------------
Cash in hand	3,15,000	3,20,000	5,000	-------------
Cash at bank	10,000	18,000	8,000	
Total Current Assets (A)	5,62,000	6,61,000		
Current Liabilities:				
Sundry creditors	45,000	55,000	----------	10,000
Bills payable	25,000	36,000		11,000
Liability for Expenses	15,000	12,000	3,000	
Total Current Liabilities (B)	85,000	1,03,000		
Working Capital (A-B)	4,77,000	5,58,000		
Changes in Working Capital				
Increase in Working Capital	81,000			81,000
Total	5,58,000	5,58,000	1,02,000	1,02,000

Trade investments are long term investments

Funds Flow Statement of Sohan Ltd., for the Year Ended December 31, 2008

Sources	Amt. Rs.	Application	Amt. Rs.
Funds from operation	1,75,000	Redemption of preference shares	50,000
Equity share capital	1,00,000	Payment of (last year's proposed dividend)	42,000
Sale of Land	50,000	Payment of tax (provision of the last year)	40,000
Sale of Machine	10,000	Purchase of plant	42,000
Dividend on investment	1,000	Purchase of investment	61,000
(Credited to investment account)			
		Payment of interim dividend	20,000
		Increase in Working Capital	81,000
	3,36,000		3,36,000

Working Notes:

1. **Calculation of Funds from Operations**

Particulars	Amt. Rs.	Amt. Rs.
Closing balance of profit and loss account		48,000
Less: Opening balance of profit & loss account		(30,000)
Profit Earned during the year 2008		18,000
Add: Goodwill written- off	10,000	
Preliminary expenses written- off	5,000	
Depreciation	10,000	
Provision for taxation	50,000	
Proposed final dividend	50,000	
Loss on sale on plant	2,000	
Transfer to general reserve	10,000	
Interim dividend	20.000	
		1,57,000
Funds from operations		1,75,000

2. Land Account

Dr. **Cr.**

Particulars	Amt. Rs.	Particulars	Amt. Rs.
To Balance b/d	3,00,000	By Cash(Sale of Land, bal. figure)	50,000
To Capital reserve (profit on sale)	20,000	By Balance c/d	2,70,000
	3,20,000		3,20,000

3. Plant Account

Dr. **Cr.**

Particulars	Amt. Rs.	Particulars	Amt. Rs.
To Balance b/d	1,80,000	By Cash(Sale of Plant)	10,000
To Purchase(b/ figure)	42,000	By Profit & Loss A/c (Loss)	2,000
		By Profit & Loss A/c (Depreciation)	10,000
		By Balance c/d (Closing balance)	2,00,000
	2,22,000		2,22,000

4. Investment Account

Dr. **Cr.**

Particulars	Amt. Rs.	Particulars	Amt. Rs.
To Balance b/d	30,000	By Cash (Dividend received out of pre-acquisition profit)	1,000
To Purchase(b/ figure)	61,000	By Balance c/d	90,000
	91,000		91,000

5. Provision for Taxation Account

Dr. **Cr.**

Particulars	Amt. Rs.	Particulars	Amt. Rs.
To Balance A/c	40,000	By Balance b/d	40,000
To Balance c/d	50,000	By Adjusted P & L A/c (provision for the year) (b/ figure)	50,000
	90,000		90,000

Assumed that the provision for tax for the previous year of Rs.40, 000 was paid during the year.

CASH FLOW STATEMENT:

Cash plays a very important role in the economic life of a business. A firm needs cash to make payment to its suppliers, to incur day-to-day expenses and to pay salaries, wages, interest and dividends etc. In fact, what blood is to a human body, cash is to a business enterprise. Thus, it is very essential for a business to maintain an adequate balance of cash. For example, a concern operates profitably but it does not have sufficient cash balance to pay dividends, what message does it convey to the shareholders and public in general. Thus, management of cash is very essential. There should be focus on movement of cash and its equivalents. Cash means, cash in hand and demand deposits with the bank. Cash equivalent consists of bank overdraft, cash credit, short term deposits and marketable securities.

Cash Flow Statement deals with flow of cash which includes cash equivalents as well as cash. This statement is an additional information to the users of Financial Statements. The statement shows the incoming and outgoing of cash. The statement assesses the capability of the enterprise to generate cash and utilize it. Thus a Cash-Flow statement may be defined as a summary of receipts and disbursements of cash for a particular period of time. It also explains reasons for the changes in cash position of the firm. Cash flows are cash inflows and outflows. Transactions which increase the cash position of the entity are called as inflows of cash and those which decrease the cash position as outflows of cash.

Cash flow Statement traces the various sources which bring in cash such as cash from operating activities, sale of current and fixed assets, issue of share capital and debentures etc. and applications which cause outflow of cash such as loss from operations, purchase of current and fixed assets, redemption of debentures, preference shares and other long-term debt for cash. In short, a cash flow statement shows the cash receipts and disbursements during a certain period. The statement of cash flow serves a number of objectives which are as follows :

1. Cash flow statement aims at highlighting the cash generated from operating activities.

2. Cash flow statement helps in planning the repayment of loan schedule and replacement of fixed assets, etc.

3. Cash is the centre of all financial decisions. It is used as the basis for the projection of future investing and financing plans of the enterprise.

4. Cash flow statement helps to ascertain the liquid position of the firm in a better manner. Banks and financial institutions mostly prefer cash flow statement to analyse liquidity of the borrowing firm.

5. Cash flow Statement helps in efficient and effective management of cash.

6. The management generally looks into cash flow statements to understand the internally generated cash which is best utilised for payment of dividends.
7. It is very useful in the evaluation of cash position of a firm.

Illustration: 5

TRADING AND PROFIT AND LOSS ACCOUNT

For the year ending 31st March, 2010

Dr. Cr.

To Purchase	Rs. 20,000	By Sales		Rs. 30,000
To Wages	5,000			
To Gross Profit c/d	5,000			
	30,000			30,000
To Salaries	1,000	By Gross Profit b/d		5,000
To Rent	1,000	By Profit on Sale of Building:		
To Depreciation on Plant	1,000	Book Value	10,000	
To Loss on Sale of Furniture	500	Sold for	15,000	5,000
To Goodwill written off	1,000			
To Net Profit	5,500			
	10,000			10,000

Calculate the Cash from Operations.

Solution:

CASH FROM OPERATIONS

	Net Profit as per P&L Account		Rs.5,500
Add:	Non-cash items (items which do not result in outflow of cash)		
	Depreciation	1,000	
	Loss on Sale of Furniture	500	
	Goodwill written off	1,000	2,500
			8,000
Less:	Non-cash items(items which do not result in inflow of cash)		
	Profit on sale of Building (Rs.15,000 will be taken as a separate source of cash)		5,000
	CASH FROM OPERATIONS		3,000

Illustration: 6

The following are the summarized Balance Sheets of a Company as on 31st December, 2007 and 20088

	2007	2008
Liabilities		
Share Capital	Rs.2,00,000	Rs.2,50,000
General Reserve	50,000	60,000
Profit & Loss	30,500	30,600
Bank Loan (Long-term)	70,000	-
Sundry Creditors	1,50,000	1,35,000
Provision for Taxation	30,000	35,000
	5,30,500	5,10,800
Assets		
Land and Buildings	2,00,000	1,90,000
Machinery	1,50,000	1,69,000
Stock	1,00,000	74,000
Sundry Debtors	80,000	64,200
Cash	500	600
Bank	-	8,000
Goodwill	-	5,000
	5,30,500	5,10,800

Additional Informations:

During the year ended 31st December, 2008:

(i) Dividend of Rs.23,000 was paid.

(ii) Assets of another company were purchased for a consideration of Rs.50,000 payable in shares.

The following assets were purchased: Stock Rs.20, 000; Machinery Rs.25,000

(iii) Machinery was further purchased for Rs.8,000

(iv) Depreciation written off of Machinery Rs.12,000

(v) Income Tax provided during the year Rs.33,000

(vi) Loss on sale of Machinery rs.200 was written off to general reserve.

You are required to prepare the Cash Flow Statement.

Solution:

CASH FLOW STATEMENT
For the year ending 31st December, 2008

	Cash Balance as on 1st Jan.,2008		Rs. 500
Add:	Sources of Cash:		
	Sale of Machinery		1,800
	Cash from Operations:		
	Funds from Operations	Rs. 88,300	
Add:	Decrease in Stock	46,000	
	Decrease in Debtors	15,800	
		1,50,100	
Less:	Decrease in Creditors	14,800	1,35,300
			1,37,600
	Applications of cash:		
	Payment of Dividend	23,000	
	Purchase of Machinery	8,000	
	Tax Paid	28,000	
	Mortgage loan repaid	70,000	1,29,000
	Closing Cash and Bank balances (cash in hand Rs.600 + cash at Bank Rs.8,000		8,600

Working Notes:

1. **ADJUSTED PROFIT AND LOSS ACCOUNT**

Particulars	Rs.	Particulars	Rs.
To Dividend	23,000	By Balance b/d	30,500
To Depreciation on Building	10,000	By Funds from Operations (Balancing figure)	88,300
To Provision for Tax	33,000		
To Transfer to General Reserve	10,200		
To depreciation on Machinery	12,000		
To balance c/d	30,600		
	1,18,800		1,18,800

2. **MACHINERY ACCOUNT**

Particulars	Rs.	Particulars	Rs.
To Balance b/d	1,50,000	By Depreciation	12,000
To Share Capital	25,000	By General Reserve	200
To Bank	8,000	By Bank	1,800
		By Balance c/d	1,69,000
	1,83,000		1,83,000

3. **GENERAL RESERVE**

Particulars	Rs.	Particulars	Rs.
To Machinery A/C	200	By Balance b/d	50,000
To Balance c/d	60,000	By P&L A/C	10,200
	60,200		60,200

4. **PROVISION FOR TAXATION**

Particulars	Rs.	Particulars	Rs.
To Bank	28,000	By Balance b/d	30,000
To Balance c/d	35,000	By P&L A/C	33,000
	63,000		63,000

5. **DECREASE IN STOCK**

Particulars	Rs.
Stock as on 31-12-2007	1,00,000
Less: Stock as on 31-12-2008 (after deducting stock purchased by issuing shares)	54,000
Increase in Cash	46,000

DIFFERENCE BETWEEN FUNDS FLOW STATEMENT AND CASH FLOW STATEMENT

	Basis of Difference	Funds Flow Statement	Cash Flow Statement
1.	**Basis of Analysis**	Funds flow statement is based on broader concept i.e. working capital.	Cash flow statement is based on narrow concept i.e. cash, which is only one of the elements of working capital.
2.	**Source**	Funds flow statement tells about the various sources from where the funds generated with various uses to which they are put.	Cash flow statement stars with the opening balance of cash and reaches to the closing balance of cash by proceeding through sources and uses.
3.	**Usage**	Funds flow statement is more useful in assessing the long-range financial strategy.	Cash flow statement is useful in understanding the short-term phenomena affecting the liquidity of the business.
4.	**Schedule of Changes in Working Capital**	In funds flow statement changes in current assets and current liabilities are shown through the schedule of changes in working capital.	In cash flow statement changes in current assets and current liabilities are shown in the cash flow statement itself.
5.	**End Result**	Funds flow statement shows the causes of changes in net working capital.	Cash flow statement shows the causes the changes in cash.
6.	**Principal of Accounting**	Funds flow statement is in alignment with the accrual basis of accounting.	In cash flow statement data obtained on accrual basis are converted into cash basis.

Unit – IV

COST ACCOUNTING

Cost accounting is a process of collecting, recording, classifying, analyzing, summarizing, allocating and evaluating various alternative courses of action & control of costs. Its goal is to advise the management on the most appropriate course of action based on the cost efficiency and capability. Cost accounting provides the detailed cost information that management needs to control current operations and plan for the future.

Cost:

Cost has been defined in the terminology given by the Chartered Institute of Management Accountants (CIMA) as 'the amount of expenditure incurred or attributed on a given thing'. More simply, it can be defined as that which is given or scarified to obtain something. Thus the cost of an article is its purchase or manufacturing price, i.e. it would consist of its direct material cost, direct labour cost, direct and indirect expenses allocated or apportioned to it.

Objectives of Cost Accounting:

(i) Ascertainment of cost and determining the selling price.

(ii) Cost control i.e. keeping costs under check.

(iii) Ascertaining profitability and profits earned on each activity including ascertaining causes that lead to a particular figure.

(iv) Collection and presentation of such information or statements as are required by management in its task of planning and making decisions.

Functions of Cost Accounting:

(i) To work out cost per unit of the different products manufactured by the organization.

(ii) To provide an accurate analysis of this cost.

(iii) To maintain costs to the lowest point consistent with the most efficient operating conditions. It requires the examination of each cost in the light of the service or benefit obtained so that the maximum utilization of each rupee will be obtained.

(iv) To work out the wastage in each process of manufacture and to prepare reports as may be necessary to assist in the control of wastage.

(v) To provide necessary data for the fixation of selling price of commodities manufactured.

(vi) To compute profits earned on each of the products and to advise management as to how these profits can be improved.

(vii) To help management in control of inventory so that there may be minimum locking up of capital in stocks of raw materials, stores, work-in-process and finished goods.

(viii) To install and implement cost control systems like Budgetary Control and Standard Costing for the control of expenditure on materials, labour and overheads.

(ix) To advise management on future expansion.

(x) To advise management on the profitability or otherwise of new lines of products.

(xi) To carry out special cost studies and investigations which are invaluable to management in determining policies and formulating plans directed towards profitable operations.

Distinction between Cost Accounting and Financial Accounting

The following table broadly covers the most important differences between financial accounting and cost accounting.

Point of Differences	Financial Accounting	Cost Accounting
Meaning	Recoding of transactions is part of financial accounting. We make financial statements through these transactions. With the help of financial statements, we analyze the profitability and financial position of a company.	Cost accounting is used to calculate cost of the product and also helpful in controlling cost. In cost accounting, we study about variable costs, fixed costs, semi-fixed costs, overheads and capital cost.

Purpose	Purpose of the financial statement is to show correct financial position of the organization.	To calculate cost of each unit of product on the basis of which we can take accurate decisions.
Recording	Estimation in recording of financial transactions is not used. It is based on actual transactions only.	In cost accounting, we book actual transactions and compare it with the estimation. Hence costing is based on the estimation of cost as well as on the recording of actual transactions.
Controlling	Correctness of transaction is important without taking care of cost control.	Cost accounting done with the purpose of control over cost with the help of costing tools like standard costing and budgetary control.
Period	Period of reporting of financial accounting is at the end of financial year.	Reporting under cost accounting is done as per the requirement of management or as-and-when-required basis.
Reporting	In financial accounting, costs are recorded broadly.	In cost accounting, minute reporting of cost is done per-unit wise.
Fixation of Selling Price	Fixation of selling price is not an objective of financial accounting.	Cost accounting provides sufficient information, which is helpful in determining selling price.
Relative Efficiency	Relative efficiency of workers, plant, and machinery cannot be determined under it.	Valuable information about efficiency is provided by cost accountant.

Valuation of Inventory	Valuation basis is 'cost or market price whichever is less'	Cost accounting always considers the cost price of inventories.
Process	Journal entries, ledger accounts, trial balance, and financial statements	Cost of sale of product(s), addition of margin and determination of selling price of the product.

COST SHEET:

A cost sheet is prepared to know the outcome and breakup of costs for a particular accounting period. Columnar form is most popular. Although cost sheets are prepared as per the requirements of the management, the information to be incorporated in a cost sheet should comprise of cost per unit and the total cost for the current period along with the cost per unit and the total cost of preceding period. Data of financial statement is used for preparation of cost sheet. Therefore, reconciliation of cost sheet and financial statement should be done on a regular interval.

COST SHEET OR STATEMENT OF COST **Total Units………**		
Opening Stock of Raw material	... ...	... ...
Add: Purchases	... ...	... ...
	... ...	... ...
Less: Closing Stock	... ...	... ...
Cost of material Consumed →	... ...	... ...
Add: Direct Labor/Wages	... ...	... ...
Prime Cost →	... ...	... ...
Add: Works overheads	... ...	... ...

Works Cost →	... ...	... ...
Add: Administration overheads	... ...	... ...
Cost of Production →	... ...	... ...
Add: Selling and distribution overheads	... ...	... ...
Total Cost or Cost of Sale →	... ...	... ...

Illustration: 1

Prepare a Cost Sheet and find out the cost of production and costing profit from the following information for the month June 2012.

Direct material consumed Rs. 40,000
Direct Wages Rs. 14,000
Direct Expenses Rs. 4,000
Factory Overhead Rs. 5,000
Administration Overhead Rs. 7,000
Selling and Distribution Overhead Rs. 9,000

The profit for the company is estimated as 20% on cost of sales.

Solution:

Cost Sheet for the month ended 30th June 2012

Particulars	Rs.
Direct material consumed	40,000
Direct Wages	14,000
Direct Expenses	4,000
PRIME COST	58,000
Factory Overhead	5,000
WORKS COST	63,000
Administration Overhead	7,000
COST OF PRODUCTION	70,000
Selling and Distribution Overhead	9,000
COST OF SALES	79,000
PROFIT	19,750
SALES	98,750

Profit = 20% on sales

i.e., Sales = 100; Profit = Rs.20

Cost = 100-20 = Rs.80

Hence, Profit = 20/80x79, 000 = Rs.19, 750

Illustration: 2

Nila Ltd., is providing the following information related to the month of July 2013, in order to prepare Cost Sheet and to find out the cost per unit.

Direct Material Rs. 37,000

Direct Wages Rs. 30,000

Direct Expenses Rs. 13,000

Factory overhead absorbed is 60% of direct wages. Administration overhead absorbed is 30% of factory cost. Selling and distribution overhead is absorbed is 20% on cost of production. Profit earned is 20% on cost of sales. Number of units produced is 1,000.

Solution:

Cost Sheet of Nila Ltd., for the month July 2013

Particulars	**Rs.**
Direct Material Direct Wages Direct Expenses	37,000 30,000 13,000
PRIME COST	80,000
Factory Overhead [60/100x30,000]	18,000
WORKS COST	98,000
Administration Overhead [30/100x98,000]	29,400
COST OF PRODUCTION	1,27,400
Selling and Distribution Overhead [20,100x1,52,880]	25,480
COST OF SALES	1,52,880
PROFIT[20/100x152880]	30,576
SALES	1,83,456

Production = 1,000 units

Cost of Production per unit = 127400/1000 = Rs.127.40

Cost of Sales per unit = 1, 52,880/1000 = Rs.152.88

Selling price per unit = 1,83,456/1000 = Rs.183.46

Illustration: 3

AZIZ & Co. Ltd provides the following information from its costing records for the month of July 2014.

	Rs.
Stock of raw materials as on 1st July 2014	11,500
Stock of raw materials as on 31st July 2014	12,800
Purchase of material	27,500
Direct wage paid	17,500
Direct Expenses	8,700
Factory Overhead	6,400
Administration Overhead	10,300
Selling and Distribution Overhead	12,300
Work-in-progress as on 1st July 2014	14,500
Work-in-progress as on 31st July 2014	11,200
Stock of finished goods as on 1st July 2014	17,500
Stock of finished goods as on 1st July 2014	13,000
Sales	95,000

Prepare a Cost Sheet and find out the profit.

Solution:

Cost Sheet for the month July 2014

Particulars	Rs.	Rs.
Opening Stock of material	11,500	
Add: Purchase	27,500	
	39,000	
Less: Closing Stock of material	12,800	
Direct Material Consumed		26,200
Direct Wages		17,500
Direct Expenses		8,700
PRIME COST		52,400
Add: Factory Overhead	6,400	
Opening Work-in-progress	14,500	
	20,900	
Less: Closing Work-in-progress	11,200	9,700
WORKS COST		62,100
Add: Administration Overhead		10,300
COST OF PRODUCTION		72,400
Add: Opening Stock of Finished Goods		17,500
		89,900
Less: Closing Stock of Finished Goods		13,000
COST OF GOODS SOLD		76,900
Add: Selling and Distribution Overhead		12,300
COST OF SALES		89,200
PROFIT		5,800
SALES		95,000

ACTIVITY BASED COSTING

Activity Based Costing (ABC) is a modern form of absorption costing method, which emerged during late 1960's. It helps to account for product costs more accurately. Its is not an alternate costing system to job costing or process costing. In traditional approach to costing system, costs were first collected for production and service centres and finally the costs were absorbed by jobs/processes/products. Thus, over heads are first related to cost centres and then to cost objects, i.e., products and jobs. In Activity Based Costing, the costs are related to activities such as purchases, material handling, quality inspection, etc. The distinctive feature of Activity Based Costing is its focus on activities as the fundamental cost objects.

Activity Based Costing is based on the principle that products consume activities. It gives manager a clear picture of the economics of their operations/activities involved. The other important difference between the traditional costing system and Activity Based Costing system is the extent of allocation across the value chain. Under traditional costing, only indirect production costs are generally assigned to products.

Activity Based Costing system focuses on allocation of those costs which are useful to decision making. Costs which are beyond production such as marketing, customer services, engineering and design costs are also allocated.

Activity Based Costing Process:

Stages and Flow of Costs in Activity Based Costing:

There are two primary stages in Activity Based Costing. First, tracing costs to activities: second, tracing activities to products. The different steps in the two stages of Activity Based Costing are explained below:

Step 1: Identify the main activities in the organization.

Examples include: Materials handling, purchasing, receipt, dispatch, machining, assembly and so on.

Step 2: Identify the factors which determine the costs of an activity. These are known as cost drivers.

Examples include: Number of purchase orders, number of orders delivered, number of set-up and so on.

Step 3: Collect the costs of each activity. These are known as cost pools and are directly equivalent to conventional cost centres.

Step 4: Charge support overheads to products on the basis of their usage of the activity, expressed in terms of the chosen cost drivers.

Cost Drivers:

An activity is a unit of work. If you go to a restaurant for lunch/dinner, a waiter or waiters might perform the following units of work.

- Seat customer and offer menu
- Take your order
- Send orders to kitchen
- Bring food
- Replenish beverages
- Determine and bring bill
- Collect money and give change
- Clear table

Each of these is an activity and the performance of each activity consumes resources that cost money. To manage activities and their costs, it is necessary to understand how costs respond to cost drivers, the factors that cause or influence costs.

Activity Cost Drivers:

Activity cost drivers are specific units of work (activities) performed to serve customer needs that consume costly resources. The customer may be outside the organization, such as a client of an advertising firm or inside the organization, such as an accounting office that receives maintenance services. Because the performance of

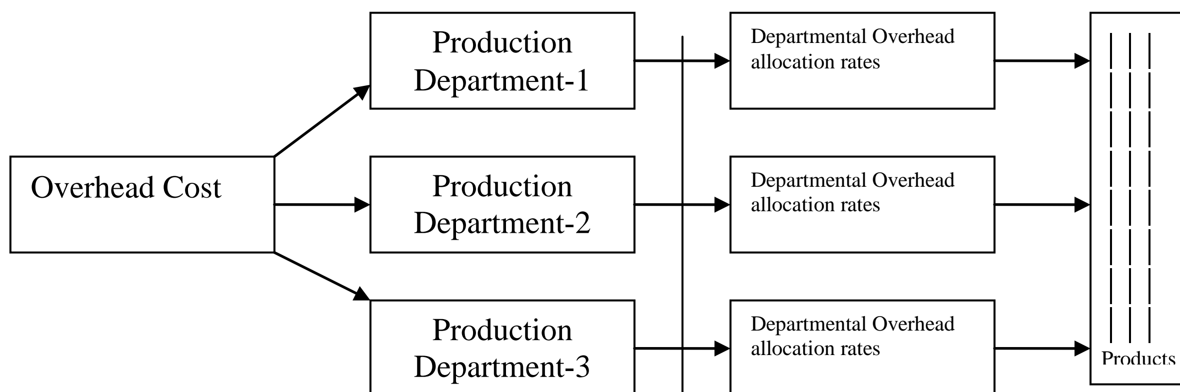
activities consumes resources and resources cost money, the performance of activities drives cost. In a manufacturing organization the following are examples of some activity cost drivers.

1.	Number of receiving orders for the receiving department.
2.	Number of purchase orders for the cost of operating the purchase department.
3.	Number of dispatch orders for the dispatch department.
4.	Number of units.
5.	Number of setups.
6.	Amount of labour cost incurred
7.	Value of materials in a product.
8.	Number of materials handling hours.
9.	Number of schedule changes.
10.	Number of parts received per month.
11.	Number of inspections.
12.	Number of machine hours used on a product.
13.	Number of set up hours.
14.	Number of direct labour hours
15.	Number of sub-assemblies.
16.	Number of vendors.
17.	Number of purchasing and ordering hours.
18.	Number of units scrapped.
19.	Number of labour transactions.
20.	Number of customer orders processed.
21.	Number of parts.
22.	Number of employees.

Activity Cost Drivers

COMPARISON OF TRADITIONAL COSTING AND ACTIVITY BASED COSTING SYSTEM:

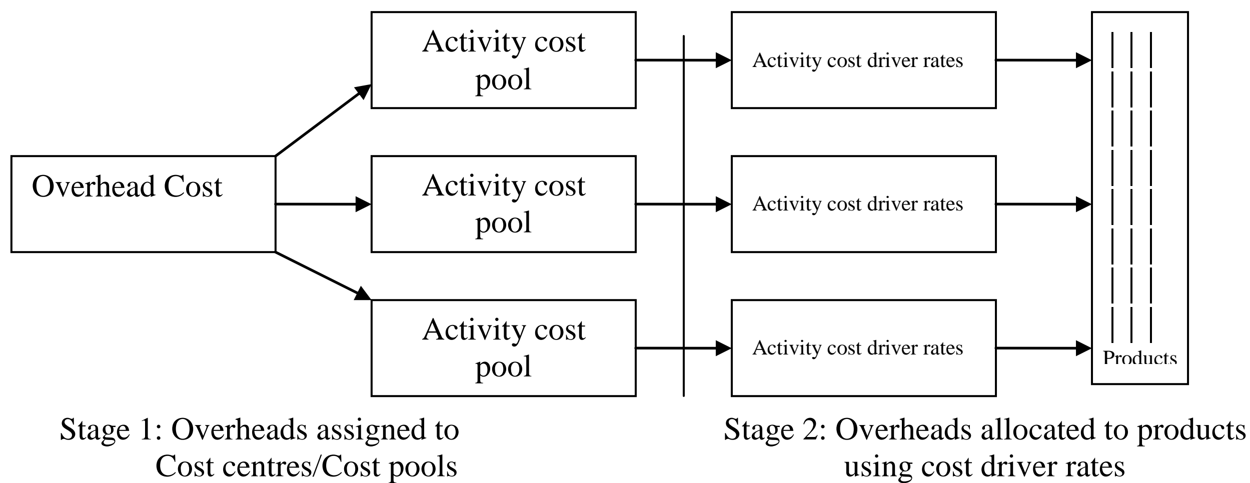
(a) Traditional Product Costing System



Stage 1: Overheads assigned to Stage 2: Overheads allocated to products

production departments using cost driver rates

a) Activity Based Product Costing System



Stage 1: Overheads assigned to Cost centres/Cost pools

Stage 2: Overheads allocated to products using cost driver rates

TARGET COSTING

Target costing is new approach in management and cost accounting. Target cost acts as a proactive cost management mechanism. It puts emphasis on managing costs by looking what the customers are willing to pay. Charles T. Horngreen, defined target costing as, "A target cost is the estimated long run costs of a product (service) that when sold enables the company to achieve the targeted income. Target cost, is derived by subtracting the target profit margin from the target price."

Target Cost = Sales price (for the target market share)—Desired Profit

It is being used widely among different industries all over the world.

According to Peter Drucker, target costing will be one of "price- led costing" and not "cost – led pricing".

Features of Target Costing

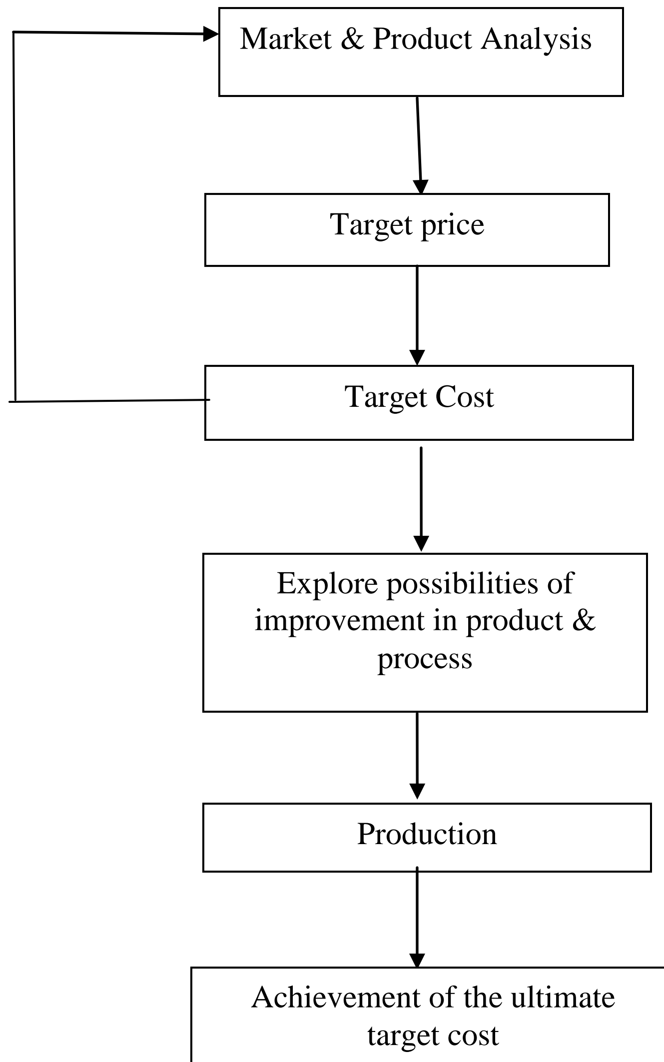
Target cost has the following three features:

(a) It treats product costs as an independent variable which is targeted to be achieved. Traditional cost methods treat products costs as dependent variable which is not the case with target costing.

(b) It is oriented towards customer affordability or market driven pricing. It is based on target price and target price is market oriented price.

(c) It is the proactive approach to achieve target costs by product and process developments and modifications.

Concept of Target Costing



Implementation of Target Costing

Based on the above definitions, implementation of target costing requires the following steps:

(a) **Development of the product**: It is the first step. Aproduct needs to the developed according to the requirements and perceptions of potential customers in the market. It is the development of customers perceived needs in the shape of a product or service that will satisfy them.

(b) Fixation of Target Price: Target price sets the base for the target cost. It is the fixation of price of a product or service on the basis of detailed market studies. The firm has to collect a great deal of information external to the firm obtained mostly through market- surveys; consumer preferences and competitor's price.

(c) Fixation of Target Cost: Target costing is derived by deducing the desired profit margin from the target price. It is the fixation of estimated long run cost of a product or service which will enable to achieve the targeted income. A targeted price is established on the basis of market factors such as, the position of the company in the market place, targeted market share, price strategy, targeted market niche, competitor price response and elasticity of demand etc. In fixing target cost a manufacturer has to subtract target profit from target cost.Expected cost of the product is also called drifting and is further reduced by the use of costs value engineering analysis.

(d) Value Engineering: Value Engineering is the way to achieve target costs. Value Engineering is the evaluation of the product and processes to produce a product which will have good response in the market at the lowest possible cost. Horngreen defines Value Engineering as, "It is a systematic evaluation of all aspects of research and development, design of products and process, production marketing and customer service, with the objective of reducing costs while satisfying customer's needs". Value Engineering focuses on those areas where account spending is out of acceptability of customers. It is an integral part of costing. It is estimated cost works out to be greater than target cost, business manager need to design product & reexamine the cost associated.

(e) Reduce indirect cost allocations: Since a significant portion of costs of a product are indirect, these costs must also be addressed to be reduced. The organization must examine these costs, do reengineering of business processes and minimize non value added costs.

(f) **Management of results and maintain the focus of management:** Current costs needs to be tracked against target costs. The focus of management must be maintained to achieve target costs.

Unit – V

MARGINAL COSTING

The Institute of Cost and Works Accountants of India (ICWAI) defines marginal costing as, "A method that considers only the variable cost as cost of production, leaving out period costs to be absorbed from the marginal contribution'.

Features of Marginal Costing:

1. Marginal costing is not a method of costing like process costing, job costing, operating costing, etc., but a technique dealing with the effects of changes in the cost, volume, price, sales mix on the profits.
2. Under marginal costing technique, cost of production comprises of variable costs only. As such the valuation of the finished goods and work-in-progress is made on the basis of variable costs.
3. Fixed costs do not form part of cost of production for the purposes of marginal costing. They are treated separately and may be charged wholly to the Profit and Loss Account for the accounting period.
4. For marginal costing techniques prices of the various products are fixed by the manufacturing concerns on the basis of marginal cost and marginal contribution.

Profit/Volume Ratio

Profit volume ratio expresses the relationship of contribution to sales. It is popularly known as P/V Ratio.

$$\text{P/V Ratio} = \frac{\text{Sales} - \text{Variable Cost}}{\text{Sales}} \times 100$$

(or)

$$\text{P/V Ratio} = \frac{\text{Contribution}}{\text{Sales}} \times 100$$

BREAK-EVEN POINT ANALYSIS:

Break-even point is the level of sales at which profit is zero. At break even point total sales are equal to total cost (variable + fixed). If a firm cannot manage sales to cover variable as well as fixed costs it will have to bear losses.

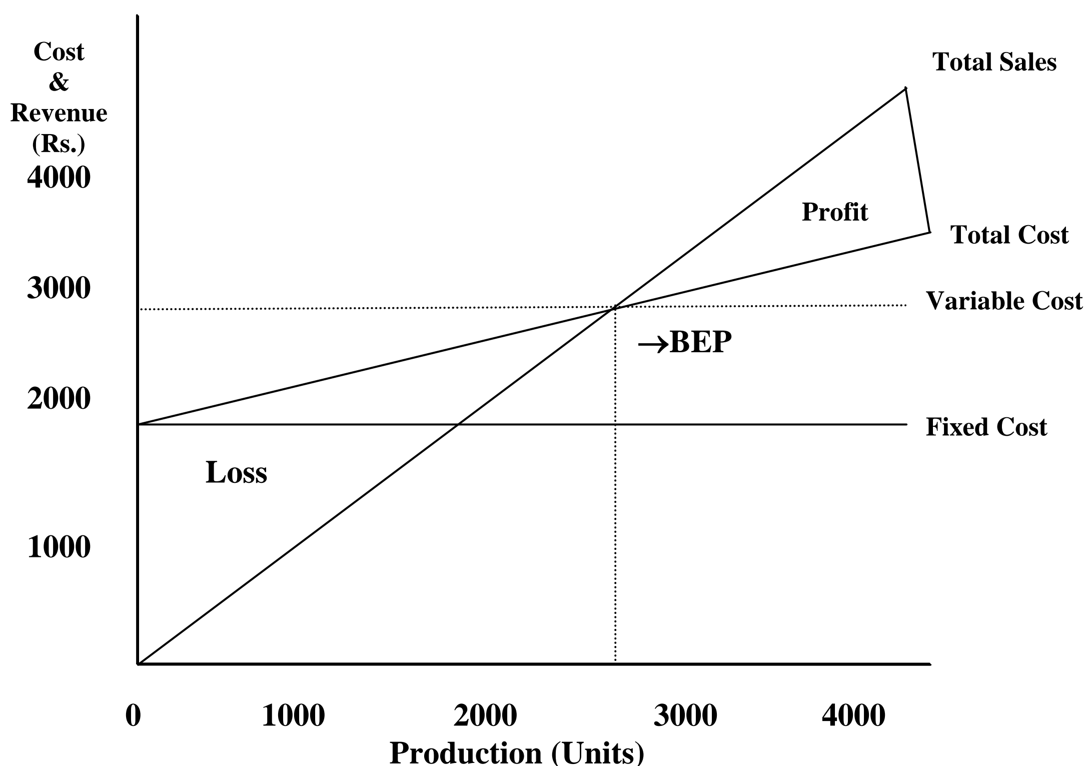
$$\text{Break Even Point (for Sales)} = \frac{\text{Total Fixed Cost}}{\text{Contribution}} \times \text{Sales}$$

(or)

$$\text{Break Even Point (for Sales)} = \frac{\text{Total Fixed Cost}}{\text{P/V Ratio}} \times \text{Sales}$$

$$\text{Break Even Point (for Units)} = \frac{\text{Total Fixed Cost}}{\text{Contribution per unit}}$$

Graphical Representation (Break-even Chart):



Break Even Analysis - Advantages:

Following are some of the main advantages of break even analysis:

1. It explains the relationship between cost, production, volume and returns.
2. It can be extended to show how changes in fixed cost, variable cost, commodity prices, revenues will effect profit levels and break even points. Break even analysis is most useful when used with partial budgeting, capital budgeting techniques.
3. The major benefits to use break even analysis are that it indicates the lowest amount of business activity necessary to prevent losses.

Margin of Safety (MOS):

The excess of actual or budgeted sales over the break even volume of sales is called margin of safety. At break even point costs are equal to sales revenue and profit is zero. Margin of safety, therefore, tells us the amount of sales that can be dropped before losses begin to be incurred. With a high margin of safety business have low risk of not breaking even and with a low margin of safety business have high risk of not breaking even.

Margin of Safety = Actual Sales – Break Even Sales

Angle of Incidence:

In the break-even chart, angle of incidence is the angle formed by the sales line and total cost line at the break-even point. A large angle of incidence shows a high rate of profit being made while a small angle of incidence indicates a low rate of profit.

BENEFITS OF BREAK EVEN ANALYSIS

The following are the benefits out of break-even analysis.

1. Make or buy decision:

The Break Even analysis assists in making a choice between two courses of action to make versus to buy. If the variable cost is less than the price that has to be paid to an outside supplier, it may be better to manufacture than to buy.

2. Production planning:

The Break Even analysis helps in planning the production of items giving maximum contribution towards profit and fixed costs.

3. Cost control:

As a cost control device, the Break Even analysis can be used to detect insidious upward creep of costs that might otherwise go unnoticed.

4. Financial structure:

Break-even analysis provides an understanding of the behaviour of profits in relation to output. This understanding is significant in planning the financial structure of a company.

5. Conditions of uncertainty:

When some reasonable basis for subjective extrapolation is available, the breakeven analysis provides the financial management with information helpful in its decision-making activities.

Limitations of Break Even Analysis:

The following limitations of break-even analysis have to be kept in mind while making use of this tool.

1. Many costs and their components do not fall into neatly compartmentalized fixed or variable cost categories as they possess the characteristics of both types.

2. If company sells several products, the financial manager has to prepare and evaluate a number of profit-graphs covering integrated segments of independent activities.

3. A break-even chart represents a short-run static relationship of costs and output and become obsolete very quickly.

4. The relations indicated in the break-even chart do not help for all levels of operations. Costs tend to be higher than shown on the static break-even chart when the plant’s operation approaches 100 percent of its capacity.

5. The frequent changes happening in the selling price of the product affect the reliability of the break even analysis.

6. The cost of securing funds to expand is disregarded in break-even chart.

Illustration: 1

From the following information in relation to a manufacturing concern, calculate the Break-Even point in units.

Output : 3,000 units

Variable Cost per unit : Rs.30

Selling Price per unit : Rs.40

Total Fixed Cost : Rs.15,000

Solution:

Contribution per unit = Selling price per unit – Variable Cost per unit

= Rs.40 – Rs.30

= Rs.10

$$\text{Break Even Point (for Units)} = \frac{\text{Total Fixed Cost}}{\text{Contribution per unit}}$$

$$= \frac{15,000}{10}$$

= 1,500 units

Illustration: 2

From the following data, calculate the P/V Ratio, Break-Even point and Margin of Safety.

Sales		Rs.80,000
Variable Costs	Rs.40,000	
Fixed Costs	Rs.24,000	Rs.64,000
Profit		Rs.16,000

Solution:

1.

$$\text{P/V Ratio} = \frac{\text{Sales} - \text{Variable Cost}}{\text{Sales}} \times 100$$

$$\text{P/V Ratio} = \frac{80,000 - 40,000}{80,000} \times 100$$

$$= \frac{40,000}{80,000} \times 100 = 50\%$$

2.

$$\text{Break Even Point (for Sales)} = \frac{\text{Total Fixed Cost}}{\text{P/V Ratio}}$$

$$\text{Break Even Point (for Sales)} = \frac{24{,}000}{50\%} = \text{Rs.}48{,}000$$

4. Margin of Safety = Actual Sales – BEP Sales
   = Rs.80,000 – Rs.48,000
   = Rs.32,000

Illustration: 3

From the following information, Calculate the amount of variable cost.

Break-even Sales volume: Rs. 3, 000
Profit : Rs.1, 500
Fixed Costs : Rs.6, 000

Solution:

(ii) Contribution = Total Fixed Cost + Profit
= Rs. 6,000 + Rs.1,500
= Rs.7,500

(iii)Actual Sales

$$\text{Sales at B.E.P} = \frac{\text{Fixed Cost}}{\text{Contribution}} \times \text{Sales}$$

$$\text{Rs.}30{,}000 = \frac{6{,}000}{7{,}500} \times \text{Sales}$$

$$\text{Sales} = \frac{7{,}500}{6{,}000} \times 30{,}000 = \text{Rs.}37{,}500$$

(iii) Variable Cost = Sales – Contribution
= Rs.37,500 – Rs.7,500 = Rs.30,000

Illustration: 4

Calculate the profit earned by the company during the year 2012 from the following information:

Fixed Cost Rs.3,00,000
Variable Cost Rs.25 per unit
Selling Price Rs. 50 per unit
Number of units produced 50,000

Solution:

Sales = 50,000 x 50 = Rs. 25,00,000

Fixed cost = Rs. 3,00,000

Variable Cost = 50,000 x 25 = Rs. 12,50,000

Sales – Variable Cost = Fixed Cost + Profit

Profit = Sales – Variable Cost - Fixed Cost

= 25, 00,000 – 12, 50,000 – 3, 00,000

= Rs. 9, 50,000

Illustration: 5

Calculate (a) Profit/Volume (b) Fixed Cost (c) Sales volume to earn a profit of Rs. 40,000.

Sales Rs.2,00,000

Profit Rs.25,000

Variable Cost is 80% of sales.

Solution:

Sales = Rs.2,00,000

Variable Cost = 80/100 x 2,00,000 = Rs.1,60,000

(a) P/V Ratio $= \frac{\text{Sales – Variable Cost}}{\text{Sales}} \times 100$

$= \frac{2,00,000 - 1,60,000}{2,00,000} \times 100$

= 20%

(b) Contribution = Fixed Cost + Profit

Sales – Variable Cost = Fixed Cost + Profit

2,00,000 – 1,60,000 = Fixed Cost + 25,000

Fixed Cost = 40,000 – 25,000

= 15,000

(c) P/V Ratio $= \frac{\text{Fixed Cost + Profit}}{\text{Sales}}$

$= \frac{15,000 + 40,000}{20\%}$

= Rs.2,75,000

Absorption Costing:

According to C.I.M.A, London, "Absorption costing is a technique whereby fixed costs as well as variable costs are allotted to cost units". Under absorption costing, all costs, whether fixed or variable, are charged to the cost units. For this reason, absorption costing is also known as full costing or total costing.

Difference between Marginal costing and Absorption costing

The points of difference between marginal costing and absorption costing are as follows:

1. **Segregation of costs into fixed and variable costs:**

   Marginal costing considers variable costs as cost of production and therefore requires segregation of costs into fixed and variable costs. On the other hand, under absorption costing, all costs are allocated to products. Hence, there is no need of segregation of costs into fixed and variable costs.

2. **Cost element in product cost:**

   Under absorption costing, fixed overheads are added to the cost of production whereas under marginal costing, fixed cost are not included in the cost of production.

3. **Inventory values:**

   Under Marginal costing, the value of inventories is comparatively lower as inventories are valued in terms of variable costs only. Under absorption costing, the value of inventories is comparatively higher because inventories are valued in terms of total costs, i.e., variable as well as fixed costs.

4. **Profit:**

   The term profit, under the absorption costing, is the difference between sales and cost of goods sold. Under marginal costing, the term profit, in a broader

perspective, is known as contribution margin which is excess of sales over variable cost of goods sold.

5. Effect of increase or decrease in inventories:

If inventories increase during the period, absorption costing will reveal more profit than marginal costing. When inventories decrease, absorption costing will report lesser profits than marginal costing.

6. Suitability:

Absorption costing does not reveal the cost, volume, profit relationship. Therefore, it is not suitable for decision- making whereas marginal costing study the relationship cost, volume and profit. Hence, it is very much suitable for making decisions.

7. Problem of under or over absorption:

As fixed costs are included in the products under absorption costing, there is a possibility for over or under absorption. Whereas in the case of marginal costing fixed costs are included in the product. So the problem of under and absorption of fixed costs does not arise.

We can understand better the determination of profit or income under both absorption and marginal costing techniques with the help of an illustration. This illustration shows the determination of profit under both the method.

Illustration: 6

Statement of profitability
(Absorption Costing Technique)

	Products			
	A	**B**	**C**	**Total**
	(Rs.)	**(Rs.)**	**(Rs.)**	**(Rs.)**
(a) Sales	20,000	30,000	50,000	1,00,000
Direct Material	5,000	15,000	10,000	30,000
Direct Wages	6,000	4,500	5,000	15,500
Variable Factory Overhead	2,600	4,500	13,000	20,100
Variable Selling Overhead	1,400	3,000	10,000	14,400
Fixed Overhead	1,600	2,400	6,000	10,000

(b) Total Cost	16,600	29,400	44,000	90,000
Net Profit (a) – (b)	3,400	600	6,000	10,000

Statement of profitability

(Marginal Costing Technique)

	Products			
	A	**B**	**C**	**Total**
	(Rs.)	**(Rs.)**	**(Rs.)**	**(Rs.)**
(a) Sales	20,000	30,000	50,000	1,00,000
Direct Material	5,000	15,000	10,000	30,000
Direct Wages	6,000	4,500	5,000	15,500
Variable Factory Overhead	2,600	4,500	13,000	20,100
Variable Selling Overhead	1,400	3,000	10,000	14,400
(b) Marginal Cost	15,000	27,000	38,000	80,000
Contribution (a) – (b)	5,000	3,000	12,000	20,000
Less Fixed Overhead				10,000
Net Profit				10,000

From the Statement of Profitability prepared under marginal costing technique, we can observe that:

Sales – Marginal Cost = Contribution

(or)

Fixed Cost + Profit = Contribution

Similarly in case of loss:

Fixed Cost - Loss = Contribution

Combining these two equations, we can get the fundamental marginal cost equation as follows:

Sales – Variable Cost = Fixed Cost ± Profit / Loss

Or symbolically $S - V = F \pm P$, Where 'S' denotes: Sales

'V'denotes: Variable Cost or Marginal Cost, 'F' denotes: Fixed Cost

'P' denotes: profit, 'P' denotes: loss

This marginal cost equation is widely used in marginal costing problems since it plays an important role in profit projection. If in any given case, any three of the four factors or items (S, V, F and P) are known, the fourth can easily be found out with the help of the marginal cost equation.

BUDGETING

BUDGET:

A budget is a quantitative expression of a plan for a defined period of time. It may include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows. It expresses strategic plans of business units, organizations, activities or events in measurable terms.

Budget helps to aid the planning of actual operations by forcing managers to consider how the conditions might change and what steps should be taken now and by encouraging managers to consider problems before they arise. It also helps co-ordinate the activities of the organization by compelling managers to examine relationships between their own operation and those of other departments. Other essentials of budget include:

- To control resources
- To communicate plans to various responsibility center managers.
- To motivate managers to strive to achieve budget goals.
- To evaluate the performance of managers
- To provide visibility into the company's performance
- For accountability

Budgeting:

According to J.A.Scott, “It is the system of management control and accounting in which all operations are forecasted and so far as possible planned ahead, and the actual results compared with the forecasted and planned ones”.

Advantages of Budgeting and Budgetary control:

There are a number of advantages to budgeting and budgetary control:

1. Budgeting compels management to think about the future, which is probably the most important feature of a budgetary planning and control system. Forces management to look ahead, to set out detailed plans for achieving the targets

for each department, operation and (ideally) each manager, to anticipate and give the organisation purpose and direction.

2. Budgeting promotes coordination and communication.
3. Budgeting clearly defines areas of responsibility. It requires managers of budget centres to be made responsible for the achievement of budget targets for the operations under their personal control.
4. Budgeting provides a basis for performance appraisal. A budget is basically a yardstick against which actual performance is measured and assessed. Control is provided by comparisons of actual results against budget plan. Departures from budget can then be investigated and the reasons for the differences can be divided into controllable and non-controllable factors.
5. Budgeting enables remedial action to be taken as variances emerge.
6. Budgeting motivates employees by participating in the setting of budgets.
7. Budgeting improves the allocation of scarce resources.
8. Budgeting economises management time by using the management by exception principle.

Types of Budget:

1. **Sales budget** – It is an estimate of future sales, often broken down into both units and currency. It is used to create company sales goals.
2. **Production budget** – It is an estimate of the number of units that must be manufactured to meet the sales goals. The production budget also estimates the various costs involved with manufacturing those units, including labor and material. Created by product oriented companies.
3. **Capital budget** – It is used to determine whether an organization's long-term investments such as new machinery, replacement machinery, new plants, new products, and research development projects are worth pursuing.
4. **Cash flow/Cash budget** – It is a prediction of future cash receipts and expenditures for a particular time period. It usually covers a period in the short-term future. The cash flow budget helps the business determine when income

will be sufficient to cover expenses and when the company will need to seek outside financing.

5. **Marketing budget** – It is an estimate of the funds needed for promotion, advertising, and public relations in order to market the product or service.
6. **Project budget** – It is a prediction of the costs associated with a particular company project. These costs include labour, materials, and other related expenses. The project budget is often broken down into specific tasks, with task budgets assigned to each. A cost estimate is used to establish a project budget.
7. **Revenue budget** – It consists of revenue receipts of government and the expenditure met from these revenues. Tax revenues are made up of taxes and other duties that the government levies.
8. **Expenditure Budget** – It includes spending data items.

Illustration: 7

ABC Company produces two items namely X and Y and sells them in Chennai and Mumbai markets. The following information are related to the year ending 31st March 2011.

Markets	Products	Budgeted Sales	Actual Sales
Chennai	X	600@Rs.12	800@Rs.12
	Y	500@Rs.35	400@Rs.35
Mumbai	X	900@Rs.12	120@Rs.12
	Y	700@Rs.35	500@Rs.35

Market studies reveal that product ‘X’ is popular as it is under priced. It is observed if its price is reduced by Re.1 it will find a good market. On the other hand, product’Y’ is over priced and it will get good market, if the selling price is reduced to Rs.33. The management has agreed for this. The impact of the change in price is reported as follows

Products	Increase in Sales Chennai	Over Current Budget Mumbai
X	+20%	+10%
Y	+25%	+5%

In addition to this, the following additional sales above the estimated sales are possible with an intensive advertisement.

Products	Chennai	Mumbai
X	50 units	70 units
Y	60 units	50 units

Solution:

SALES BUDGET

Area	Product	Budget for the year			Actual Sales			Budget for the future period		
		Units	Price (Rs.)	Value (Rs.)	Units	Price (Rs.)	Value (Rs.)	Units	Price (Rs.)	Value (Rs.)
Chennai	X	600	12	7,200	800	12	9,600	770	11	8,470
	Y	500	35	17,500	400	35	14,000	685	33	22,605
	Total	1,100		24,700	1,200		23,600	1,455		31,075
Mumbai	X	900	12	10,800	1,200	12	14,400	1,060	11	11,660
	Y	700	35	24,500	500	35	17,500	785	33	25,905
	Total	1,600		35,300	1,700		31,900	1,845		37,565
	X	1,500	12	18,000	2,00	12	24,000	1,830	11	20,130
	Y	1,200	35	42,000	900	35	31,500	1,470	33	48,510
Total		2,700		60,000	2,900		55,500	3,300		68,640

Working:

	X Units	Y Units
Budgeted Sales of Chennai	600	500
Add: Increase	120 (20%)	125 (25%)
	720	625
Increase due to Advertisement	50	60
Total	770	685
Budgeted Sales of Mumbai	900	700
Add: Increase	90 (10%)	35 (5%)
	990	735
Increase due to Advertisement	70	50
Total	1060	785

Illustration: 8

The expenses for budgeted production of 10,000 units in a factory are furnished below:

	Per Unit (Rs.)
Materials	70
Labour	25
Variable Overheads	20
Fixed Overheads	10
Variable Expenses (Rs.1,00,000)	5
Selling Expenses	13
Distribution Expenses	7
Administration Expenses	5
Total Cost of per unit (to make and sell)	155

Prepare a Budget for production of:

(b) 8,000 units, (b) 6,000 units, and (c) indicate cost per unit at both the levels.

Assume that administration expenses are fixed for all levels of production.

Solution:

FLEXIBLE BUDGET

Nature of Cost and other Expenses	**10,000 Units**		**8,000 Units**		**6,000 Units**	
	Per Unit (Rs.)	**Amount (Rs.)**	**Per Unit (Rs.)**	**Amount (Rs.)**	**Per Unit (Rs.)**	**Amount (Rs.)**
Production Expenses:						
Materials	70	7,00,000	70	5,60,000	70	4,20,000
Labour	25	2,50,000	25	2,00,000	25	1,50,000
Overheads	20	2,00,000	20	1,60,000	20	1,20,000
Direct Variable Expenses	5	50,000	5		5	30,000
Fixed Overheads: (Rs.1,00,000)	10	1,00,000		1,00,000		1,00,000
Selling Expenses						
Fixed	1.3	13,000	1.625	13,000	2.167	13,000
Variable	11.7	1,17,000	11.7	93,600	11.7	70,200
Distribution Expenses:						
Fixed	1.4	14,000	1.750	14,000	2.334	14,000
Variable	5.6	56,000	5.600	44,800	5.6	33,600
Administration Expenses:	5.0	50,000	6.250	50,000	8.333	50,000
Total Cost to Make and Sell	155	15,50,000	159.425	12,75,400	166.801	10,00,800

Illustration: 9

The information regarding the expenses of a company at 40% capacity are as follows:

Particulars	Rs.
Fixed Expenses	
Salaries	80,000
Rent	40,000
Administrative Expenses	60,000
Depreciation	40,000
Variable Expenses:	
Material	1,90,000
Labour	60,000
Others	30,000
Semi-Variable Expenses:	
Indirect Labour	95,000
Repairs & Maintenance	75,000
Electricity	30,000

The estimated sales at various levels of capacity are,
Rs.8,00,000 at 40% Capacity
Rs.10,00,000 at 50% Capacity
Rs.12,00,000 at 60% Capacity
Rs.15,00,000 at 70% Capacity

The fixed expenses remain same till 100% capacity. Semi-variable expenses remain constant till 50% of capacity. It will increase by 15% between 50% and 65% capacity and further increased by 10% above 65% capacity.

Prepare a Flexible Budget and calculate the profit at various levels of capacities (40, 50%, 60% and 70%).

Solution:

Particulars	**Capacity**			
	40% (Rs.)	**50% (Rs.)**	**60% (Rs.)**	**70% (Rs.)**
Fixed Expenses:				
Salaries	80,000	80,000	80,000	80,000
Rent	40,000	40,000	40,000	40,000
Administrative Expenses	60,000	60,000	60,000	60,000
Depreciation	40,000	40,000	40,000	40,000
Variable Expenses:				
Material	1,90,000	2,37,500	2,85,000	3,32,500
Labour	60,000	75,000	90,000	1,05,000

Others	30,000	37,500	45,000	52,500
Semi-Variable Expenses:				
Indirect Labour	95,000	95,000	1,09,250	1,18,750
Repairs & Maintenance	75,000	75,000	86,250	93,750
Electricity	30,000	30,000	34,500	37,500
Total Cost	7,00,000	7,70,000	8,70,000	9,60,000
Profit	1,00,000	2,30,000	3,30,000	5,40,000
Estimated Sales	8,00,000	10,00,000	12,00,000	15,00,000

Illustration: 10

Prepare a Cash Budget for the month of May, June and July 1989 on the basis of the following information:

1. Income and Expenditure Forecasts:

Month	Credit Sales (Rs.)	Credit Purchase(Rs.)	Wages (Rs.)	Manufacturing Expenses (Rs.)	Office Expenses (Rs.)	Selling Expenses (Rs.)
March	60,000	36,000	9,000	4,000	2,000	4,000
April	62,000	38,000	8,000	3,000	1,500	5,000
May	64,000	33,000	10,000	4,500	2,500	4,500
June	58,000	35,000	8,500	3,500	2,000	3,500
July	56,000	39,000	9,500	4,000	1,000	4,500
August	60,000	34,000	8,000	3,000	1,500	4,500

2. Cash balance on 1st May, 1989 Rs.8,000.
3. Plant costing Rs.16,000 is due for delivery in July, payable 10% on delivery and the balance after 3 months.
4. Advance tax of Rs.8,000 each is payable in march and June.
5. Period of credit allowed (i) by suppliers – two months, and (ii) to customers – one month.
6. Lag in payment of manufacturing expenses – ½ month.
7. Lag in payment of office and selling expenses – one month.

Solution:

CASH BUDGET

Particulars	May 1989 (Rs.)	June 1989 (Rs.)	July 1989 (Rs.)
Opening balance	8,000	13,750	12,250
Estimated Cash Receipts:			
Debtors (Credit Sales)	62,000	64,000	58,000
	70,000	77,750	70,250
Estimated Cash Payments:			
Creditors (Credit Purchase)	36,000	38,000	33,000
Wages	10,000	8,500	9,500
Manufacturing Expenses	3,750	4,000	3,750
Office Expenses	1,500	2,500	2,000
Selling Expenses	5,000	4,500	3,500
Plant – payment on delivery	-	-	1,600
Advance Tax	-	8,000	-
Total	56,250	65,500	53,350
Closing Balance	13,750	12,250	16,900

Notes:

(i) Opening balance for June has been written after finding closing balance for May, and for July after finding the closing balance for June.

(ii) Since the period of credit allowed to the customers is one month, the amount of credit sales in April shall be collected in May and so on.

(iii) Since the period of credit allowed by the suppliers is two months, the payment for credit purchases in March shall be made in May and so on.

(iv) One-half of the manufacturing expenses of April and one-half of those of May shall be paid in May, i.e., (1/2 of Rs.3,000) + (1/2 of Rs.4,500) i.e., Rs.3,750 and so on.

(v) Office and Selling Expenses of April shall be paid in May and so on.

Illustration: 11

HCL Ltd., presents the following information as on 31st March 2010.

Sales Rs. 5,00,000

Direct Material Cost – 20% of Sales Rs. 40,000

Direct Expenses Rs. 50,000

Factory Overheads:

Supervisors Salary Rs.3,000 per month

Manager's Salary Rs. 4,000 per month

Foreman's Salary Rs.1,500 per month

Light & Power Rs.10,000

Depreciation on Plant & Machinery Rs. 15,000

Spare and lubricating oil 1.5% of Sales

Repairs & Maintenance 2% of Plant & Machinery

Administration Overhead Rs.40,000 per year.

Selling and Distribution overhead Rs.30,000 per year.

Value of Plant & Machinery Rs.5,00,000

Prepare a Master Budget.

Solution:

Master Budget

Particulars		Rs.	Rs.
Sales			5,00,000
Less: Cost of Production			
Direct Material		1,00,000	
Direct Wages		40,000	
Direct Expenses		50,000	
PRIME COST		1,90,000	
Factory Overhead:			
Fixed: Manager's Salary	48,000		
Supervisor's Salary	36,000		
Foreman's Salary	18,000		
Depreciation	15,000	1,17,000	
Variable: Light & Power	10,000		
Spares & Lubricating Oil	7,500		
Repairs & Maintenances	10,000	27,500	
WORKS COST			3,34,500
GROSS PROFIT			1,65,500
Less: Administration Overhead		40,000	
Selling & Distribution Overhead		30,000	70,000
NET PROFIT			95,5000

ZERO BASE BUDGETING:

Zero Base Budgeting (ZBB) is a method of budgeting whereby all activities are revaluated each time budget is formulated and every item of expenditure in the budget is fully justified. That is, ZBB involves starting from stretch or zero.

In traditional budgeting, departmental managers need justify only increase over the prior year's budget known as incremental budgeting. This implies that what is

already being spent is automatically sanctioned. Under the ZBB concept, each department's functions are reviewed completely and all expenditures, rather than only the increases, must be approved.

Peter A. Pyhrr, who was termed as 'Father of Zero base budgeting' defines ZBB as an operating planning and budgeting process which requires each manager to justify his entire budget requests in detail from scratch(hence zero- basis). Each manager states why he should any money at all. This approach requires that all activities be identified as decision packages which would be evaluated by systematic analysis ranked in the order of importance.

The traditional budgets are having a lot of drawbacks. Some of them are as follows:

i) The problem of using historical data or previous years expenditures as the basis for current years budget. So, the inefficiencies of a prior year are carried forward in determining subsequent year's level of performance.

ii) No priorities are established throughout the organization.

iii) Decision – making is irrational in the absence of rigorous analysis of all proposed costs and benefits.

iv) No attempts to evaluate alternative means of accomplishing the same objective.

The technique of ZBB attempts provide a solution for overcoming the drawbacks of traditional budgeting by enabling top management to focus on key areas, alternatives and priorities of action throughout the organization. Zero base budgeting examines a programme, function or responsibility from, 'scratch'. It suggests that an organization should not only make decision about the proposed new programmes but it should also, from time to time, review the appropriateness of the existing programmes. The manager proposing the activity has to prove that the activity is essential and the amount demanded are reasonable taking into account the volume of activity. Nothing is allowed simply because it was being allowed in the past.

Process of Zero- Base Budgeting

The following steps are involved in Zero base budgeting:

i) Determination of the objectives of budgeting.

ii) Determination of the extent to which the ZBB is to be introduced.

iii) Development of decision units.

iv) Development of decision packages.

v) Review and ranking of packages.

vi) Preparation of budgets.

Applications of Zero Base Budgeting

Zero Base Budgeting involves the following stages:

(1) Each separate activity of the organization is identified and called a decision package. A decision package is a document that identifies and describes a specific activity in such a manner that management can (i) evaluate it and ranks it against other activities competing for limited resources and (ii) decide whether to approve or disapprove it.

(2) Each decision package must be justified.

(3) If justified, then the cost of minimum efforts needed to sustain each decision package is to be determined.

(4) Alternatives for each decision package are considered in order to select better and cheaper options for the package.

(5) Incremental decision package are also justified and costed.

(6) Managers rank their decision packages in order of priority for resource allocation.

(7) Resources are allocated to the packages.

Advantages of Zero Base Budgeting

i) It provides the organization with systematic way to evaluate different operations and programmes undertaken.

ii) It ensures the more efficient allocation of resources.

iii) It ensures that each and every programme undertaken by managers is really essential for the organization, and is being performed in the best possible way.

iv) It motivates the managers by involving their participation.

v) It creates the sense of cost consciousness in the minds of managers, therefore it helps them in identifying the priorities in the overall interests of the organization.

vi) The document of decision packages provides the management with a deep, co-ordination knowledge of all the firm's operations.

Disadvantages of Zero Base Budgeting

i) It involves a lot of additional paper work.

ii) It may invite stiff resistance from managers as they have to practically justify all their work.

iii) The cost of preparing the various decision packages may be very high in large firms involving vast number of decision packages.

iv) It may not offer any significant control advantage in the areas where objectives are difficult to quantify such as research and development and general administration.

Code No.: 5010 Sub.Code: DRM 13

M.B.A. (DD & CE) DEGREE EXAMINATION

APRIL 2012

First Year – Non –Semester

Business Administration

ACCOUNTING FOR MANAGERS

(For those who joined in July 2008 and afterwards)

Time: Three hours Maximum: 100 marks

SECTION – A (5X5 = 25 Marks)

Answer any FIVE Questions

1. Explain the objectives of Management Accounting.
2. Explain Funds flow statement.
3. Explain various sources of Working Capital.
4. What are the Causes for Depreciation?
5. Explain Break Even Chart.
6. Explain Activity Based Costing.

SECTION – A (5X15 = 75 Marks)

Answer any FIVE Questions

7. Explain basic concepts and conventions of accounting.
8. Explain Accounting Ratios.
9. The information regarding the expenses of a company at 40% capacity are as follows:

Particulars	**Rs.**
Fixed Expenses	
Salaries	80,000
Rent	40,000
Administrative Expenses	60,000
Depreciation	40,000
Variable Expenses:	
Material	1,90,000
Labour	60,000
Others	30,000
Semi-Variable Expenses:	
Indirect Labour	95,000
Repairs & Maintenance	75,000

Electricity 30,000

The estimated sales at various levels of capacity are,
Rs.8,00,000 at 40% Capacity
Rs.10,00,000 at 50% Capacity
Rs.12,00,000 at 60% Capacity
Rs.15,00,000 at 70% Capacity

The fixed expenses remain same till 100% capacity. Semi-variable expenses remain constant till 50% of capacity. It will increase by 15% between 50% and 65% capacity and further increased by 10% above 65% capacity.

Prepare a Flexible Budget and calculate the profit at various levels of capacities (40, 50%, 60% and 70%).

10. Explain various types of Budgets.

11. The following is the Trial Balance of ABC Ltd as at March 31st 1997.

	Debit (Rs.)	Credit (Rs.)
Opening Stock on April 1, 1996	70,000	-
Purchase	2,40,000	-
Wages	50,000	-
Discount	5,000	6,000
Salaries	14,000	-
Rent and General Expenses	25,000	-
P&L A/C, 1.4.1996	-	65,000
Dividend Paid	9,000	-
Equity Capital	-	1,00,000
Debtors and Creditors	12,000	11,000
Plant and Machinery	36,000	-
Cash	4,000	-
Reserve	-	15,000
Bad Debts	3,000	-
Sales	-	2,71,000
	4,68,000	4,68,000

You are required to make out the Trading and Profit and Loss Account for the year ended 31.3.1997 and the Balance Sheet as at the date. You are also to make provision in respect of the following.

e. Stock on 31.3.1997, Rs. 86,000
f. Depreciate Plant and Machinery by 10% per annum.
g. Provide 5% as discount on debtors.
h. Provide $2_{1/2}$ % discount on creditors.

11. Explain the difference between financial accounting and management accounting.

Prepared by
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