Unit 2. Accounting Basics

Accounting is a business language. We can use this language to communicate financial transactions and their results. Accounting is a comprehensive system to collect, analyze, and communicate financial information.

The origin of accounting is as old as money. In early days, the number of transactions were very small, so every concerned person could keep the record of transactions during a specific period of time. Twenty-three centuries ago, an Indian scholar named Kautilya alias Chanakya introduced the accounting concepts in his book Arthashastra. In his book, he described the art of proper account keeping and methods of checking accounts. Gradually, the field of accounting has undergone remarkable changes in compliance with the changes happening in the business scenario of the world.

A book-keeper may record financial transactions according to certain accounting principles and standards and as prescribed by an accountant depending upon the size, nature, volume, and other constraints of a particular organization.

With the help of accounting process, we can determine the profit or loss of the business on a specific date. It also helps us analyze the past performance and plan the future courses of action.

Definition of Accounting

The American Institute of Certified Public Accountant has defined Financial Accounting as:

“the art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events which in part at least of a financial character and interpreting the results thereof.”

Objectives and Scope of Accounting
Let us go through the main objectives of Accounting:

- **To keep systematic records** - Accounting is done to keep systematic record of financial transactions. The primary objective of accounting is to help us collect financial data and to record it systematically to derive correct and useful results of financial statements.

- **To ascertain profitability** - With the help of accounting, we can evaluate the profits and losses incurred during a specific accounting period. With the help of a Trading and Profit & Loss Account, we can easily determine the profit or loss of a firm.

- **To ascertain the financial position of the business** - A balance sheet or a statement of affairs indicates the financial position of a company as on a particular date. A properly drawn balance sheet gives us an indication of the class and value of assets, the nature and value of liability, and also the capital position of the firm. With the help of that, we can easily ascertain the soundness of any business entity.

- **To assist in decision-making** - To take decisions for the future, one requires accurate financial statements. One of the main objectives of accounting is to take right decisions at right time. Thus, accounting gives you the platform to plan for the future with the help of past records.

- **To fulfill compliance of Law** - Business entities such as companies, trusts, and societies are being run and governed according to different legislative acts. Similarly, different taxation laws (direct indirect tax) are also applicable to every business house. Everyone has to keep and maintain different types of accounts and records as prescribed by corresponding laws of the land. Accounting helps in running a business in compliance with the law.

### Accounting - Process

Accounting cycle refers to the specific tasks involved in completing an accounting process. The length of an accounting cycle can be monthly, quarterly, half-yearly, or annually. It may vary from organization to organization but the process remains the same.

**Accounting Process**

The following table lists down the steps followed in an accounting process -
1. Collecting and Analyzing Accounting Documents

It is a very important step in which you examine the source documents and analyze them. For example, cash, bank, sales, and purchase related documents. This is a continuous process throughout the accounting period.

2. Posting in Journal

On the basis of the above documents, you pass journal entries using double entry system in which debit and credit balance remains equal. This process is repeated throughout the accounting period.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td><strong>Posting in Ledger Accounts</strong></td>
<td>Debit and credit balance of all the above accounts affected through journal entries are posted in ledger accounts. A ledger is simply a collection of all accounts. Usually, this is also a continuous process for the whole accounting period.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Preparation of Trial Balance</strong></td>
<td>As the name suggests, trial balance is a summary of all the balances of ledger accounts irrespective of whether they carry debit balance or credit balance. Since we follow double entry system of accounts, the total of all the debit and credit balance as appeared in trial balance remains equal. Usually, you need to prepare trial balance at the end of the said accounting period.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Posting of Adjustment Entries</strong></td>
<td>In this step, the adjustment entries are first passed through the journal, followed by posting in ledger accounts, and finally in the trial balance. Since in most of the cases, we used accrual basis of accounting to find out the correct value of revenue, expenses, assets and liabilities accounts, we need to do these adjustment entries. This process is performed at the end of each accounting period.</td>
</tr>
<tr>
<td>6</td>
<td><strong>Adjusted Trial Balance</strong></td>
<td>Taking into account the above adjustment entries, we create adjusted trial balance. Adjusted trial balance is a platform to prepare the financial statements of a company.</td>
</tr>
<tr>
<td>7</td>
<td><strong>Preparation of Financial Statements</strong></td>
<td>Financial statements are the set of statements like Income and Expenditure Account or Trading and Profit &amp; Loss Account, Cash Flow Statement, Fund Flow Statement, Balance Sheet or Statement of Affairs Account. With the help of trial balance, we put all the information into financial statements. Financial statements clearly show the financial health of a firm by depicting its profits or losses.</td>
</tr>
</tbody>
</table>
Post-Closing Entries

All the different accounts of revenue and expenditure of the firm are transferred to the Trading and Profit & Loss account. With the result of these entries, the balance of all the accounts of income and expenditure accounts come to NIL. The net balance of these entries represents the profit or loss of the company, which is finally transferred to the owner’s equity or capital.

Post-Closing Trial Balance

Post-closing Trial Balance represents the balances of Asset, Liabilities & Capital account. These balances are transferred to next financial year as an opening balance.

Accounting - Basic Concepts

The first two accounting concepts, namely, Business Entity Concept and Money Measurement Concept are the fundamental concepts of accounting. Let us go through each one of them briefly:

Business Entity Concept

According to this concept, the business and the owner of the business are two different entities. In other words, I and my business are separate.

For example, Mr A starts a new business in the name and style of M/s Independent Trading Company and introduced a capital of Rs 2,00,000 in cash. It means the cash balance of M/s Independent Trading Company will increase by a sum of Rs 2,00,000/- . At the same time, the liability of M/s Independent Trading Company in the form of capital will also increase. It means M/s Independent Trading Company is liable to pay Rs 2,00,000 to Mr A.

Money Measurement Concept

According to this concept, “we can book only those transactions in our accounting record which can be measured in monetary terms.”

Example

Determine and book the value of stock of the following items:

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shirts</td>
<td></td>
<td>Rs 5,000/-</td>
</tr>
<tr>
<td>Pants</td>
<td></td>
<td>Rs 7,500/-</td>
</tr>
<tr>
<td>Coats</td>
<td>500 pieces</td>
<td></td>
</tr>
<tr>
<td>Jackets</td>
<td>1000 pieces</td>
<td></td>
</tr>
</tbody>
</table>
Value of Stock = Rs 29,500

Here, if we want to book the value of stock in our accounting record, we need the value of coats and jackets in terms of money. Now if we conclude that the values of coats and jackets are Rs 2,000 and Rs 15,000 respectively, then we can easily book the value of stock as Rs 29,500 (as a result of 5000+7500+2000+15000) in our books. We need to keep quantitative records separately.

**Going Concern Concept**

Our accounting is based on the assumption that a business unit is a going concern. We record all the financial transaction of a business in keeping this point of view in our mind that a business unit is a going concern; not a gone concern. Otherwise, the banker will not provide loans, the supplier will not supply goods or services, the employees will not work properly, and the method of recording the transaction will change altogether.

For example, a business unit makes investments in the form of fixed assets and we book only depreciation of the assets in our profit & loss account; not the difference of acquisition cost of assets less net realizable value of the assets. The reason is simple; we assume that we will use these assets and earn profit in the future while using them. Similarly, we treat deferred revenue expenditure and prepaid expenditure. The concept of going concern does not work in the following cases:

- If a unit is declared sick (unused or unusable unit).
- When a company is going to liquidate and a liquidator is appointed for the same.
- When a business unit is passing through severe financial crisis and going to wind up.

**Cost Concept**

It is a very important concept based on the Going Concern Concept. We book the value of assets on the cost basis, not on the net realizable value or market value of the assets based on the assumption that a business unit is a going concern. No doubt, we reduce the value of assets providing depreciation to assets, but we ignore the market value of the assets.

The cost concept stops any kind of manipulation while taking into account the net realizable value or the market value. On the downside, this concept ignores the effect of inflation in the market, which can sometimes be very steep. Still, the cost concept is widely and universally accepted on the basis of which we do the accounting of a business unit.
Dual Aspect Concept

There must be a double entry to complete any financial transaction, means debit should be always equal to credit. Hence, every financial transaction has its dual aspect:

- we get some benefit, and
- we pay some benefit.

For example, if we buy some stock, then it will have two effects:

- the value of stock will increase (get benefit for the same amount), and
- it will increase our liability in the form of creditors.

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of Stock for Rs 25,000</td>
<td>Stock will increase by Rs 25,000 (Increase in debit balance)</td>
</tr>
<tr>
<td></td>
<td>Cash will decrease by Rs 25,000 (Decrease in debit balance)</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>Creditor will increase by Rs 25,000 (Increase in credit balance)</td>
</tr>
</tbody>
</table>

Accounting Period Concept

The life of a business unit is indefinite as per the going concern concept. To determine the profit or loss of a firm, and to ascertain its financial position, profit & loss accounts and balance sheets are prepared at regular intervals of time, usually at the end of each year. This one-year cycle is known as the accounting period. The purpose of having an accounting period is to take corrective measures keeping in view the past performances, to nullify the effect of seasonal changes, to pay taxes, etc.

Based on this concept, revenue expenditure and capital expenditure are segregated. Revenues expenditure are debited to the profit & loss account to ascertain correct profit or loss during a particular accounting period. Capital expenditure comes in the category of those expenses, the benefit of which will be utilized in the next coming accounting periods as well.
Accounting period helps us ascertain correct position of the firm at regular intervals of time, i.e., at the end of each accounting period.

Matching Concept

Matching concept is based on the accounting period concept. The expenditures of a firm for a particular accounting period are to be matched with the revenue of the same accounting period to ascertain accurate profit or loss of the firm for the same period. This practice of matching is widely accepted all over the world. Let us take an example to understand the Matching Concept clearly.

The following data is received from M/s Globe Enterprises during the period 01-04-2012 to 31-03-2013:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sale of 1,000 Electric Bulbs @ Rs 10 per bulb on cash basis.</td>
<td>10,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Sale of 200 Electric Bulb @ Rs. 10 per bulb on credit to M/s Atul Traders.</td>
<td>2,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Sale of 450 Tube light @ Rs.100 per piece on Cash basis.</td>
<td>45,000.00</td>
</tr>
<tr>
<td>4</td>
<td>Purchases made from XZY Ltd.</td>
<td>40,000.00</td>
</tr>
<tr>
<td>5</td>
<td>Cash paid to M/s XYZ Ltd.</td>
<td>38,000.00</td>
</tr>
<tr>
<td>6</td>
<td>Freight Charges paid on purchases</td>
<td>1,500.00</td>
</tr>
<tr>
<td>7</td>
<td>Electricity Expenses of shop paid</td>
<td>5,000.00</td>
</tr>
<tr>
<td>8</td>
<td>Bill for March-13 for Electricity still outstanding to be paid next year.</td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

Based on the above data, the profit or loss of the firm is calculated as follows:
In the above example, to match expenditures and revenues during the same accounting period, we added the credit purchase as well as the outstanding expenses of this accounting year to ascertain the correct profit for the accounting period 01-04-2012 to 31-03-2013.

It means the collection of cash and payment in cash is ignored while calculating the profit or loss of the year.

### Accrual Concept

As stated above in the matching concept, the revenue generated in the accounting period is considered and the expenditure related to the accounting period is also considered. Based on the accrual concept of accounting, if we sell some items or we rendered some service, then that becomes our point of revenue generation irrespective of whether we received cash or not. The same concept is applicable in case of expenses. All the expenses paid in cash or payable are considered and the advance payment of expenses, if any, is deducted.

Most of the professionals use cash basis of accounting. It means, the cash received in a particular accounting period and the expenses paid cash in the same
accounting period is the basis of their accounting. For them, the income of their firm depends upon the collection of revenue in cash. Similar practice is followed for expenditures. It is convenient for them and on the same basis, they pay their Taxes.

**Objective Evidence Concept**

According to the Objective Evidence concept, every financial entry should be supported by some objective evidence. Purchase should be supported by purchase bills, sale with sale bills, cash payment of expenditure with cash memos, and payment to creditors with cash receipts and bank statements. Similarly, stock should be checked by physical verification and the value of it should be verified with purchase bills. In the absence of these, the accounting result will not be trustworthy, chances of manipulation in accounting records will be high, and no one will be able to rely on such financial statements.

**Accounting - Conventions**

We will discuss the accounting conventions in this section.

**Convention of Consistency**

To compare the results of different years, it is necessary that accounting rules, principles, conventions and accounting concepts for similar transactions are followed consistently and continuously. Reliability of financial statements may be lost, if frequent changes are observed in accounting treatment. For example, if a firm chooses cost or *market price whichever is lower* method for stock valuation and *written down value method* for depreciation to fixed assets, it should be followed consistently and continuously.

Consistency also states that if a change becomes necessary, the change and its effects on profit or loss and on the financial position of the company should be clearly mentioned.

**Convention of Disclosure**

The Companies Act, 1956, prescribed a format in which financial statements must be prepared. Every company that fall under this category has to follow this practice. Various provisions are made by the Companies Act to prepare these financial statements. The purpose of these provisions is to disclose all essential information so that the view of financial statements should be true and fair. However, the term ‘disclosure’ does not mean all information. It means disclosure of information that is significance to the users of these financial statements, such as investors, owner, and creditors.
Conventional of Materiality

If the disclosure or non-disclosure of an information might influence the decision of the users of financial statements, then that information should be disclosed.

For better understanding, please refer to General Instruction for preparation of Statement of Profit and Loss in revised schedule VI to the Companies Act, 1956:

- A company shall disclose by way of notes additional information regarding any item of income or expenditure which exceeds 1% of the revenue from operations or Rs 1,00,000 whichever is higher.
- A Company shall disclose in Notes to Accounts, share in the company held by each shareholder holding more than 5% share specifying the number of share held.

Conservation or Prudence

It is a policy of playing safe. For future events, profits are not anticipated, but provisions for losses are provided as a policy of conservatism. Under this policy, provisions are made for doubtful debts as well as contingent liability; but we do not consider any anticipatory gain.

For example, If A purchases 1000 items @ Rs 80 per item and sells 900 items out of them @ Rs 100 per item when the market value of stock is (i) Rs 90 and in condition (ii) Rs 70 per item, then the profit from the above transactions can be calculated as follows:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Condition(i)</th>
<th>Condition(ii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale Value (A) (900x100)</td>
<td>90,000.00</td>
<td>90,000.00</td>
</tr>
<tr>
<td>Less - Cost of Goods Sold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>80,000.00</td>
<td>80,000.00</td>
</tr>
<tr>
<td>Less - Closing Stock</td>
<td>8,000.00</td>
<td>7,000.00</td>
</tr>
<tr>
<td>Cost of Goods Sold (B)</td>
<td>72,000.00</td>
<td>73,000.00</td>
</tr>
</tbody>
</table>
In the above example, the method for valuation of stock is ‘Cost or market price whichever is lower’.

The prudence however does not permit creation of hidden reserve by understating the profits or by overstating the losses.

**Accounting - Classification of Accounts**

It is necessary to know the classification of accounts and their treatment in double entry system of accounts. Broadly, the accounts are classified into three categories:

- Personal accounts
- Real accounts
  - Tangible accounts
  - Intangible accounts

Let us go through them each of them one by one.

**Personal Accounts**

Personal accounts may be further classified into three categories:

**Natural Personal Account**

An account related to any individual like David, George, Ram, or Shyam is called as a **Natural Personal Account**.

**Artificial Personal Account**

An account related to any artificial person like M/s ABC Ltd, M/s General Trading, M/s Reliance Industries, etc., is called as an **Artificial Personal Account**.

**Representative Personal Account**

Representative personal account represents a group of account. If there are a number of accounts of similar nature, it is better to group them like salary payable account, rent payable account, insurance prepaid account, interest receivable account, capital account and drawing account, etc.

**Real Accounts**

Every Business has some assets and every asset has an account. Thus, asset account is called a real account. There are two type of assets:
**Tangible** assets are touchable assets such as plant, machinery, furniture, stock, cash, etc.

**Intangible** assets are non-touchable assets such as goodwill, patent, copyrights, etc.

Accounting treatment for both type of assets is same.

**Nominal Accounts**

Since this account does not represent any tangible asset, it is called nominal or fictitious account. All kinds of expense account, loss account, gain account or income accounts come under the category of nominal account. For example, rent account, salary account, electricity expenses account, interest income account, etc.

**Accounting - Systems**

There are two systems of accounting followed -

- Single Entry System
- Double Entry System

**Single Entry System**

Single entry system is an incomplete system of accounting, followed by small businessmen, where the number of transactions is very less. In this system of accounting, only personal accounts are opened and maintained by a business owner. Sometimes subsidiary books are maintained and sometimes not. Since real and nominal accounts are not opened by the business owner, preparation of profit & loss account and balance sheet is not possible to ascertain the correct position of profit or loss or financial position of business entity.

**Double Entry System**

Double entry system of accounts is a scientific system of accounts followed all over the world without any dispute. It is an old system of accounting. It was developed by ‘Luco Pacioli’ of Italy in 1494. Under the double entry system of account, every entry has its dual aspects of debit and credit. It means, assets of the business always equal to liabilities of the business.

Assets = Liabilities

If we give something, we also get something in return and vice versa.

**Rules of Debit and Credit under Double Entry System of Accounts**

The following rules of debit and credit are called the golden rules of accounts:
Classification of accounts | Rules | Effect
--- | --- | ---
Personal Accounts | Receiver is Debit
Giver is Credit | Debit=Credit
Real Accounts | What Comes In Debit
What Goes Out Credit | Debit=Credit
Nominal Accounts | Expenses are Debit
Incomes are Credit | Debit=Credit

**Example**

Mr A starts a business regarding which we have the following data:

- Introduces Capital in cash: Rs 50,000
- Purchases (Cash): Rs 20,000
- Purchases (Credit) from Mr B: Rs 25,000
- Freight charges paid in cash: Rs 1,000
- Goods sold to Mr C on credit: Rs 15,000
- Cash Sale: Rs 30,000
- Purchased computer: Rs 10,000
- Commission Income: Rs 8,000

Journal entries for above items would be done as -

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Journal Entries</th>
<th>Classification</th>
<th>Rule</th>
</tr>
</thead>
</table>
| 1 | Cash A/cDr. 50,000
To Capital A/c50,000 | Real A/c
Personal A/c | Debit what comes in;
Credit the giver(Owner) |
| 2 | Goods Purchase A/cDr. 20,000
To cash A/c20,000 | Real A/c
Real A/c | Debit what comes in;
Credit what goes out |
Goods Purchase A/c Dr. 25,000
To B A/c 25,000
Real A/c
Personal A/c
Debit what comes in;
Credit the giver

Freight A/c Dr. 1,000
To cash A/c 1,000
Nominal A/c
Real A/c
Debit all expenses
Credit what goes out

C A/c Dr. 15,000
To Sale A/c 15,000
Personal A/c
Real Account
Debit the receiver
Credit what goes out

Cash A/c Dr. 30,000
To Sale A/c 30,000
Real A/c
Real A/c
Debit what comes in;
Credit what goes out

Computer A/c Dr. 10,000
To cash A/c 10,000
Real A/c
Real A/c
Debit what comes in;
Credit what goes out

Cash A/c Dr. 8,000
To commission A/c 8,000
Real A/c
Nominal A/c
Debit what comes in;
Credit all incomes

It is very clear from the above example how the rules of debit and credit work. It is also clear that every entry has its dual aspect. In any case, debit will always be equal to credit in double entry accounting system.

Financial Accounting - Journal

“The process of recording a transaction in a journal is called journalizing the transactions.”

---Meigs and Meigs and Johnson

Journal is a book that is maintained on a daily basis for recording all the financial entries of the day. Passing the entries is called journal entry. Journal entries are passed according to rules of debit and credit of double entry system.
<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>L.F.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXXX</td>
<td>... ... ... A/cDr.</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td></td>
<td>... ... ... A/cDr.</td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td></td>
<td>To ... ... ... A/c</td>
<td>xx</td>
<td>XXXX</td>
</tr>
<tr>
<td></td>
<td>(Narration... ... ...)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Analysis and Treatment of Transactions
Let us go through the nature of transactions and their treatment in our books of accounts. The following accounting entries are commonly used in every business and they come under the category of routine journal entries.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Transaction Nature</th>
<th>Analysis and Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capital</td>
<td>Capital account is personal account. Whenever the owner introduces capital in the form of cash, goods or assets, the entry will be as here under: Cash/Goods/Asset A/c Dr. xx To Capital A/c xx (Being cash/goods/assets introduced as capital)</td>
</tr>
<tr>
<td>2</td>
<td>Drawing Account</td>
<td>Drawing account is also a capital account. Whenever the owner of the business withdraws money for his personal use, it is called drawing. The balance of Drawing account is transferred to the capital account at the end of the accounting year. Drawing A/c Dr. xx To Cash A/c xx (Being withdrawal of cash for personal use)</td>
</tr>
</tbody>
</table>

Notes:

1. Introduction of capital as well as withdrawal of capital may occur any time during the accounting year.
2. In addition to cash, there may be other expenses of the owner/proprietor which may pay directly on his behalf debating his account. For example, payment of his insurance, taxes, rent, electricity or personal phone bills.

3. Business account and personal account of proprietor are different as owner of the business and business, both are separate entities.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Trade Discount</td>
</tr>
<tr>
<td></td>
<td>Trade discount is allowed by seller to buyer directly on their sales invoice. Buyer in this case are usually whole-sellers, traders or manufacturers, who further sell this material to their customers or use the material in their manufacturing process. Rate of discount may vary from customer to customer. <strong>Treatment</strong> - No need to pass any journal entry in this case. The sale is booked on the net of trade discount. Similarly, if we get trade discount from our supplier, we book our purchase at the net of trade discount.</td>
</tr>
</tbody>
</table>

| 4 | Cash Discount |
|   | Cash discount is also allowed by seller to his buyer; still it does not come in the category of trade discount. Cash discount is a sort of scheme to inspire their debtors to release their due payment in time. For example, a seller may allow 5% cash discount, if he gets payment within a week against the time limit of 45 days. |
Treatment - If A allowed a discount of 5% to B, then

**In the books of A:**
Cash A/c Dr. xx
Discount A/c Dr. xx
To B A/c xxxx

(Being 5% discount allowed to B on payment of Rs........)

**In the books of B:**
A A/c Dr. xxx
To Discount A/c xx
To B A/c xx

(Being payment of Rs xx made to A and getting a discount of 5%)

**Note** - In the above case, discount is a loss to A and income to B.

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5 Bad Debts

Part of credit sale which is unrecovered from debtors due to some reason like insolvency, dishonesty, etc. are called bad debts of the company. Bad debts are loss to the company.

Treatment:

**(1) To book bad debts**
Bad Debts A/c Dr. xx
To Debtor A/c xx

(Being loss on account of bad debts)
<table>
<thead>
<tr>
<th></th>
<th>Expenses on purchase of Goods</th>
<th>(2) To recover bad debts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cash A/c Dr. xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To bad debts xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To bad debts recovery A/c xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Being recovery of bad debts)</td>
</tr>
</tbody>
</table>

There are a few types of expenses incurred on the purchases of goods like inward freight, octroi, cartage, unloading charges, etc.

**Treatment:**
Inward freight/Cartage/Octroi Dr. xx A/c
To Cash A/c xx
(Being freight charges paid on purchase of goods)

<table>
<thead>
<tr>
<th></th>
<th>Expenses on Sale of Goods</th>
<th>Expenses on Sale of Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Expenses are also incurred while selling products to customers such as freight outward, insurance charges, etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Treatment:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Freight outward/Insurance xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expenses A/c Dr. xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To Cash A/c xx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Being freight charges paid on sale of goods)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Expenses on Purchase of Assets</th>
<th>Expenses on Purchase of Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sometimes we need to pay expenses on the purchase of fixed assets like transportation</td>
</tr>
</tbody>
</table>
charges, installation charges, etc.

**Treatment:**

Expenses incurred on purchases of fixed asset are added in the value of fixed assets and could not be treated like expenses on purchases of goods:

<table>
<thead>
<tr>
<th>Fixed Asset A/c</th>
<th>Dr. xx</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Cash A/c</td>
<td>Dr. xx</td>
</tr>
</tbody>
</table>

(Expenses incurred on purchase of asset)

**9** Payment of Expenses

<table>
<thead>
<tr>
<th>Expenses A/c</th>
<th>Dr. xx</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Cash A/c</td>
<td>xx</td>
</tr>
</tbody>
</table>

(Being expenses incurred)

**10** Outstanding Expenses

Sometimes expenses remain outstanding at the end of the financial year, but due to the accrual basis of accounting, we need to book those expenses which are due for payment and to be paid in the next accounting year. For example, the salary due on the last day of the accounting year to be paid in the next year.

**Treatment:**

<table>
<thead>
<tr>
<th>Salary A/c</th>
<th>Dr. xx</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Prepaid Expenses</td>
</tr>
<tr>
<td>12</td>
<td>Income Received</td>
</tr>
</tbody>
</table>
Banking Transactions

13

**Note:** Income account will be replaced with the respective head of Income account.

(1) **Cheque deposited in bank**

Cheque received from party is deposited in bank, Cheque direct deposit by party in our bank account, payment made by party through NEFT or RTGS, or cash directly deposited by party in our bank account. The entry remains same in all the above cases.

Bank A/c Dr. xx
To Debtor A/c xx

(2) **Payment made to party through cheque**

Cheque issued to party or directly deposited in his bank account, or payment made through either by NEFT, RTGS, or cash directly deposited in his bank account. Entry remains same in all the above cases except in the case of cash deposited in his bank account.

Debtor A/c Dr. xx
To Bank A/c xx

(Being payment made through ..... )

If we deposit cash in his bank account, entry will be as follows:

Debtor A/c Dr. xx
To Cash A/c  xx
(Being payment made through ..... )

(3) **Cash withdrawn for office Expenses**
Cash A/c  Dr.  xx
To Bank A/c  xx
(Being cash withdrawn from bank for office use)

(4) **Cash deposited with Bank**
Cash A/c  Dr.  xx
To Cash A/c  xx
(Being cash withdrawn from bank for office use)

**Note:** The above entries No. 3 & 4 are called ‘**contra**’ entries.

(5) **Bank charge debited by bank**
Sometimes banks debit from our account against some charges for service provided by them. For example, cheque book issuing charges, demand draft issuing charges, Bank interest, etc.

Bank Commission/Charges Dr.  xx
A/c
To bank A/c  xx
(Bank charges/commission/interest debited by bank)
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 14 | **Interest on Capital** | Interest on capital, introduced by sole proprietor or partners of the firm: This entry is passed on the last date of the accounting year as follows:  
   **Interest on capital A/c**  
   Dr. xx  
   To Capital A/c xx  
   (Being interest @...... on capital provide) |
| 15 | **Payment on behalf of others** | Some expenses may be on behalf of our debtors or creditors.  
   **Debtors/Creditors A/c**  
   Dr. xx  
   To  
   Cash/Expenses xx  
   A/c  
   (Being expenses debited to party, paid on his behalf) |
| 16 | **Advance received against supply of goods/services** | Sometimes the customers pay an advance amount for the supply of goods/services, which need to be adjusted later:  
   **Bank/Cash A/c**  
   Dr. xx  
   To Advance from  
   Customers xx  
   A/c  
   (Being advance received from xxxxxxxxx) |
| 17 | **Advance paid against supply of goods/services** | As above, we may also pay an advance amount to our supplier |
Financial Accounting - Ledger

Now let us try to understand how a journal works. With the help of journal entries, we book each and every financial transaction of the organization chronically without considering how many times the same type of entry has been repeated in that particular accounting year or period.

Journal entries in any organization may vary from hundreds to millions depending upon the size and structure of the organization. With the help of a journal, each of the transactions might be recorded; however, we can conclude nothing from a journal. Let us consider the following cases. Suppose we want to know:

- the total sale value or purchase value
- the total of any particular income or expenses
- the total of amount payable to any particular creditor or receivable from a debtor

In such cases, it might be a tedious job for any bookkeeper or accountant. Hence, the next step is ledger accounts.

The ledger helps us in summarizing journal entries of same nature at single place. For example, if we pass 100 times a journal entry for sale, we can create a sales account only once and post all the sales transaction in that ledger account date-wise. Hence, an unlimited number of journal entries can be summarized in a few ledger accounts. Transferring journal entries into a ledger account is called ‘posting’.

Ruling of Account in Ledger Account

Let us see various formats of ledger accounts:
Format-1

In the books of M/s. ABC Company

Ledger account of M/s XYZ LTD.

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>F</th>
<th>Amount</th>
<th>Date</th>
<th>Particulars</th>
<th>F</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>xxxx</td>
<td>To Balance b/d</td>
<td></td>
<td>xxxx</td>
<td>xxxx</td>
<td>By Balance b/d</td>
<td></td>
<td>xxxx</td>
</tr>
<tr>
<td>xxxx</td>
<td>To Name of the debit account</td>
<td></td>
<td>xxxx</td>
<td>xxxx</td>
<td>By Name of Credit account</td>
<td></td>
<td>xxxx</td>
</tr>
<tr>
<td>xxxx</td>
<td>To Balance c/d</td>
<td>xx</td>
<td>xxxx</td>
<td>xxxx</td>
<td>By Balance c/d</td>
<td>xx</td>
<td>xxxx</td>
</tr>
<tr>
<td></td>
<td>Total Rs.</td>
<td></td>
<td>xxxx</td>
<td>Total Rs.</td>
<td></td>
<td></td>
<td>xxxx</td>
</tr>
</tbody>
</table>

Format-2

Nowadays, the handwritten books are being replaced by computerized accounts. The companies majorly use a six-column format to maintain ledger accounts of their customers. It looks as follows:

In the books of M/s. ABC Bank Ltd.

Ledger account of M/s XYZ Ltd.

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>LF</th>
<th>Amount</th>
<th>Balance</th>
</tr>
</thead>
</table>
Format-1 is used for academic purpose. Hence, this format is useful to learn the basics and principles of accounting.

Format-2 is used by banking and financial organization as well as by most of the business organizations.

**Important Points Regarding Ledger**

- Each side of a journal entry is posted in the same side of the ledger. It means the debit entry of a journal is posted in the debit side and vice-versa.

- Balance c/d refers to the balance carried down and balance b/d refers to the balance brought down.

- After posting in ledger, balancing of ledger is done. In the column named Total, the figure comes on the basis of ‘**whichever is higher**’. Means, if the total of debit side is Rs 10,000 and the total of credit is Rs 5,000, we write Rs 10,000 in the column named Total of both, the debit and the credit side.

- The difference of both sides (in this case, it is Rs 5,000) is written in the last row of the credit side as ‘**balance c/d**’. This balance is called the debit balance of account or vice-versa.

- All expenses and assets represent debit balance.

- All the income and liabilities represent credit balance including capital account.

- Debit balance of personal account represents ‘**Amount Receivable**’. This comes under the category of assets. For example debtors.

- Credit balance of personal accounts signifies ‘**Amount Payable**’. This comes under liabilities side and represents that we need to pay this amount which is credited due to goods, service, loan, or advance received.

- Debit side of real account means stock in hand or any kind of assets. Credit balance of Real account is not possible.

- Debit balance of nominal account means expenses of organization.
• Credit balance of nominal accounts means income earned.
• Debit balance of cash book means cash in hand.
• Debit side of Bank book means balance at bank.
• Credit balance of Bank book indicates ‘Bank Overdraft’.
• Debit and credit balances of nominal account (Expenses and income will be nil, because these balances get transferred to trading, and profit & loss account to arrive at profit and loss of the company.
• Balances of real and personal account appear in balance sheet of the company and to be carried forward to next accounting years.

Illustration
Journalize the following transactions and post them in to ledger account:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Transactions</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Commenced business and introduced cash</td>
<td>400,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Goods purchased for cash</td>
<td>50,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Goods purchased from Mr. Abdul</td>
<td>135,000.00</td>
</tr>
<tr>
<td>4</td>
<td>Freight charges paid on purchases</td>
<td>1,500.00</td>
</tr>
<tr>
<td>5</td>
<td>Computer purchased-cash</td>
<td>35,000.00</td>
</tr>
<tr>
<td>6</td>
<td>Freight charges paid on purchases of computer</td>
<td>500.00</td>
</tr>
<tr>
<td>7</td>
<td>Sale made to Mr. Ram</td>
<td>200,000.00</td>
</tr>
<tr>
<td>8</td>
<td>Rent paid</td>
<td>12,000.00</td>
</tr>
<tr>
<td>9</td>
<td>Salary paid</td>
<td>15,000.00</td>
</tr>
<tr>
<td>S.No.</td>
<td>Particulars</td>
<td>L.F.</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Cash A/cDr.</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>To Capital A/c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Being capital introduced)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Purchase A/cDr.</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>To Cash A/c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Being cash purchase made)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Purchase A/cDr.</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>To Abdhul A/c</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Being goods purchase from Abdhul)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Inward Freight Charges A/cDr.</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>To Cash A/c</td>
<td></td>
</tr>
</tbody>
</table>

Journal Entries
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Computer A/c Dr. To Cash A/c</td>
<td>** 35,000</td>
<td>35,000</td>
</tr>
<tr>
<td></td>
<td>(Being freight charges paid)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Computer A/c Dr. To Cash A/c</td>
<td>** 500</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>(Being freight charges on computer paid)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Ram A/c Dr. To Sale A/c</td>
<td>** 2,00,000</td>
<td>2,00,000</td>
</tr>
<tr>
<td></td>
<td>(Being sold to Mr. Ram)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Rent A/c Dr. To Cash A/c</td>
<td>** 12,000</td>
<td>12,000</td>
</tr>
<tr>
<td></td>
<td>(Being rent paid)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Salary A/c Dr. To Cash A/c</td>
<td>** 15,000</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>(Being salary paid)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Financial Accounting - Subsidiary Books

### Cash Book

Cash book is a record of all the transactions related to cash. Examples include: expenses paid in cash, revenue collected in cash, payments made to creditors, payments received from debtors, cash deposited in bank, withdrawn of cash for office use, etc.

In double column cash book, a discount column is included on both debit and credit sides to record the discount allowed to customers and the discount received from creditors respectively.

In triple column cash book, one more column of bank is included to record all the transactions relating to bank.

**Note:** In modern accounting, simple cash book is the most popular way to record cash transactions. The double column cash book or three column cash book is practically for academic purpose. A separate bank book is used to record all the banking transactions as they are more than cash transactions. These days, cash

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Cash A/c Dr.</td>
<td>To Ram A/c</td>
<td><strong>1,50,000</strong></td>
</tr>
<tr>
<td></td>
<td>(Being cash Received from Mr. Ram)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Bank A/c Dr.</td>
<td>To Cash A/c</td>
<td><strong>75,000</strong></td>
</tr>
<tr>
<td></td>
<td>(Being cash deposited in Bank)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Office Expenses A/c Dr.</td>
<td>To Cash A/c</td>
<td><strong>25,000</strong></td>
</tr>
<tr>
<td></td>
<td>(Being office expenses paid)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
is used just to meet petty and routine expenditures of an organization. In most of the organizations, the salaries of employees are paid by bank transfer.

**Note:** Cash book always shows debit balance, cash in hand, and a part of current assets.

**Single Column Cash Book**

Cash book is just like a ledger account. There is no need to open a separate cash account in the ledger. The balance of cash book is directly posted to the trial balance. Since cash account is a real account, ruling is followed, i.e. what comes in – debit, and what goes out – credit. All the received cash is posted in the debit side and all payments and expenses are posted in the credit side of the cash book.

**Format**

<table>
<thead>
<tr>
<th>CASH BOOK (Single Column)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr.</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Date</td>
</tr>
</tbody>
</table>

**Double Column Cash Book**

Here, we have an additional Discount column on each side of the cash book. The debit side column of discount represents the discount to debtors of the company and the credit side of discount column means the discount received from our suppliers or creditors while making payments.

The total of discount column of debit side of cash book is posted in the ledger account of ‘Discount Allowed to Customers’ account as ‘To Total As Per Cash Book’. Similarly, credit column of cash book is posted in ledger account of ‘Discount Received’ as ‘By total of cash book’.

**Format**

| CASH BOOK (Single Column) |
Triple Column Cash Book

When one more column of Bank is added in both sides of the double column cash book to post all banking transactions, it is called triple column cash book. All banking transactions are routed through this cash book and there is no need to open a separate bank account in ledger.

Petty Cash Book

In any organization, there may be many petty transactions incurring for which payments have to be done. Therefore, cash is kept with an employee, who deals with it and makes regular payments out of it. To make it simple and secure, mostly a constant balance is kept with that employee.

Suppose cashier pays Rs 5,000 to Mr A, who will pay day-to-day organization expenses out of it. Suppose Mr A spend Rs 4,200 out of it in a day, the main cashier pays Rs 4,200, so his balance of petty cash book will be again Rs 5,000. It is very useful system of accounting, as it saves the time of the main cashier and provides better control.

We will soon discuss about ‘Analytical or Columnar Petty Cash Book’ which is most commonly used in most of the organizations.

Format

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Particulars</td>
</tr>
</tbody>
</table>

PETTY CASH BOOK

| Amount Received | C.B.F | Date | Particulars | Amount Paid | Stationery & Printing | Cartage | Loading | Postage | L.F. |

Purchase Book

Purchase book is prepared to record all the credit purchases of an organization. Purchase book is not a purchase ledger.
**Sale Book**

The features of a sale book are same as a purchase book, except for the fact that it records all the credit sales.

**Purchase Return Book**

Sometimes goods are to be returned back to the supplier, for various reasons. The most common reason being defective goods or poor quality goods. In this case, a debit note is issued.
Sale Return Book

The reason of Sale return is same as for purchase return. Sometimes customers return the goods if they don’t meet the quality standards promised. In such cases, a credit note is issued to the customer.

**Format**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>Debit Note No.</th>
<th>L.F.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bills Receivables Book

Bills are raised by creditors to debtors. The debtors accept them and subsequently return them to the creditors. Bills accepted by debtors are called as ‘**Bills Receivables**’ in the books of creditors, and ‘**Bills Payable**’ in the books of debtors. We keep them in our record called ‘**Bills Receivable Books**’ and ‘**Bills Payable Book**’.

**Format**

<table>
<thead>
<tr>
<th>Date</th>
<th>Received From</th>
<th>Term</th>
<th>Due Date</th>
<th>L.F.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bills Payable Book

Bills payable issues to the supplier of goods or services for payment, and the record is maintained in this book.
Format

<table>
<thead>
<tr>
<th>Date</th>
<th>To Whom Given</th>
<th>Term</th>
<th>Due Date</th>
<th>L.F.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Key Features of Subsidiary Books

There is a difference between a purchase book and a purchase ledger. A purchase book records only credit purchases and a purchase ledger records all the cash purchases in chronological order. The daily balance of purchase book is transferred to purchase ledger. Therefore, purchase ledger is a comprehensive account of all purchases.

The same rule applies to sale book and sale ledgers.

- It is quite clear that maintaining a subsidiary book is facilitation to journal entries, practically it is not possible to post each and every transaction through journal entries, especially in big organizations because it makes the records bulky and unpractical.

- Maintenance of subsidiary books gives us more scientific, practical, specialized, controlled, and easy approach to work.

- It provides us facility to divide the work among different departments like sale department, purchase department, cash department, bank department, etc. It makes each department more accountable and provides an easy way to audit and detect errors.

- In modern days, the latest computer technology has set its base all over the world. More and more competent accounts professionals are offering their services. Accuracy, quick results, and compliance of law are the key factors of any organization. No one can ignore these factors in a competitive market.

Bank Reconciliation

On a particular date, reconciliation of our bank balance with the balance of bank passbook is called bank reconciliation. The bank reconciliation is a statement that consists of:

- Balance as per our cash book/bank book
• Balance as per pass book
• Reason for difference in both of above

This statement may be prepared at any time as per suitability and requirement of the firm, which depends upon the volume and number of transaction of the bank.

In these days, where most of the banking transactions are done electronically, the customer gets alerts for every transaction. Time to reconcile the bank is reduced more.

**Format**

### BANK RECONCILIATION STATEMENT

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Debit Bank Balance as per Bank Book</th>
<th>Credit Bank Balance as per Bank Book (overdraft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as per Bank Book</td>
<td>50,000</td>
<td>-50,000</td>
</tr>
<tr>
<td>1. Add: Cheque issued to parties but not presented in bank</td>
<td>3,25,000</td>
<td>3,25,000</td>
</tr>
<tr>
<td>2. Less: Cheque deposited in bank but not cleared yet</td>
<td>-50,000</td>
<td>-50,000</td>
</tr>
<tr>
<td>3. Less: Bank Charges debited by bank but not entered in our books of accounts</td>
<td>-1,200</td>
<td>-1,200</td>
</tr>
<tr>
<td>4. Less: Bank interest charged by bank but not entered in our books of accounts</td>
<td>-10,000</td>
<td>-10,000</td>
</tr>
<tr>
<td>5. Add: Payment direct deposited by party without intimation to us</td>
<td>1,75,000</td>
<td>1,75,000</td>
</tr>
<tr>
<td>Balance as per Bank Pass Book/ Statement</td>
<td>4,88,000</td>
<td>3,88,000</td>
</tr>
</tbody>
</table>

**Trial Balance**
Trial balance is a summary of all the debit and credit balances of ledger accounts. The total of debit side and credit side of trial balance should be matched. Trial balance is prepared on the last day of the accounting cycle.

Trial balance provides us a comprehensive list of balances. With the help of that, we can draw financial reports of an organization. For example, the trading account can be analyzed to ascertain the gross profit, the profit and loss account is analyzed to ascertain the profit or Loss of that particular accounting year, and finally, the balance sheet of the concern is prepared to conclude the financial position of the firm.

**Format**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Ledger Accounts</th>
<th>L.F.</th>
<th>Debit(Rs.)</th>
<th>Credit(Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ADVANCE FROM CUSTOMERS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ADVANCE TO STIFF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>AUDIT FEES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>BALANCE AT BANK</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>BANK BORROWINGS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>BANK INTEREST PAID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>CAPITAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>CASH IN HAND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>COMMISSION ON SALE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>ELECTRICITY EXPENSES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>FIXED ASSETS</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>FREIGHT OUTWARD</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>INTEREST RECEIVED</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>INWARD FREIGHT CHARGES</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>OFFICE EXPENSES</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>OUTSTANDING RENT</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>PREPAID INSURANCE</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>PURCHASES</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>RENT</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>REPAIR AND RENUWALS</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>SALARY</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>SALARY PAYABLE</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>SALE</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>STAFF WELFARE EXPENSES</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>STOCK</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>SUNDRY CREDITORS</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Financial Statements

Financial statements are prepared to ascertain the profit or loss of the business, and to know the financial position of the company.

Trading, profit & Loss accounts ascertain the net profit for an accounting period and balance sheet reflects the position of the business.

All the above has almost a fixed format, just put all the balances of ledger accounts into the format given below with the help of the trial balance. With that, we may derive desired results in the shape of financial equations.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Opening Stock</td>
<td>XX</td>
<td>By Sales</td>
<td>XX</td>
</tr>
<tr>
<td>To Purchases</td>
<td>XX</td>
<td>By Closing Stock</td>
<td>XX</td>
</tr>
<tr>
<td>To Freight charges</td>
<td>XX</td>
<td>By Gross Loss c/d</td>
<td>XXX</td>
</tr>
<tr>
<td>To Direct Expenses</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Gross Profit c/d</td>
<td>XXX</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>XXXX</strong></td>
<td><strong>Total</strong></td>
<td><strong>XXXX</strong></td>
</tr>
</tbody>
</table>

To Salaries                  | XX     | By Gross Profit b/d          | XXX    |
To Rent                       | XX     |                              |        |
<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
<th>Action</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Office Expenses</td>
<td>XX</td>
<td>By Bank Interest received</td>
<td>XX</td>
</tr>
<tr>
<td>To Bank charges</td>
<td>XX</td>
<td>By Discount</td>
<td>XX</td>
</tr>
<tr>
<td>To Bank Interest</td>
<td>XX</td>
<td>By Commission Income</td>
<td>XX</td>
</tr>
<tr>
<td>To Electricity Expenses</td>
<td>XX</td>
<td>By Net Loss transfer to Balance sheet</td>
<td>XX</td>
</tr>
<tr>
<td>To Staff Welfare Expenses</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Audit Fees</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Repair &amp; Renewal</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Commission</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Sundry Expenses</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Depreciation</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Net Profit transfer to Balance sheet</td>
<td>XX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>XXXX</td>
<td>Total</td>
<td>XXXX</td>
</tr>
</tbody>
</table>

Balance sheet of M/s ABC Limited

as on 31-03-2014

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Amount</th>
<th>Assets</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>XX</td>
<td>Fixed Assets XXXX</td>
<td>XX</td>
</tr>
<tr>
<td>Add: Net Profit</td>
<td>XX</td>
<td>Less: Description XX</td>
<td></td>
</tr>
<tr>
<td>Bank Borrowings</td>
<td>XX</td>
<td>Current Assets -</td>
<td></td>
</tr>
</tbody>
</table>
Long Term Borrowing | XX | Stock | XX

**Current Liabilities** - | Debtors | XX

Advance Form Customers | XX | Cash In hand | XX

Sundry creditors | XXX | Cash at Bank | XX

Bills Payable | Bills receivables | XX

Expenses Payable | XXXX

<table>
<thead>
<tr>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXXX</td>
</tr>
</tbody>
</table>

**Total**

| XXXX |

Owner’s Equity
The equation of equity is as follows:

Owner Equity = Assets – liability

The owner or the sole proprietor of a business makes investments, earns some profit on it, and withdraws some money out of it for his personal use called drawings. We may write this transaction as follows:

Investment (capital) ± Profit or Loss – drawings = Owner’s Equity

**Current Assets**
Assets that are convertible into cash within the next accounting year are called current assets.

Cash in hand, cash in bank, fixed deposit receipts (FDRs), inventory, debtors, receivable bills, short-term investments, staff loan and advances; all these come under current assets. In addition, prepaid expenses are also a part of current assets.

**Note:** Prepaid expenses are not convertible into cash, but they save cash for the next financial or accounting year.

Current Liabilities
Like current assets, current liabilities are immediate liabilities of the firm that are to be paid within one year from the date of balance sheet.

Current liabilities primarily include sundry creditors, expenses payable, bills payable, short-term loans, advance from customers, etc.
Financial Accounting - Depreciation

Depreciation reduces the value of assets on a residual basis. It also reduces the profits of the current year.

Depreciation indicates reduction in value of any fixed assets. Reduction in value of assets depends on the life of assets. Life of assets depends upon the usage of assets.

There are many deciding factors that ascertain the life of assets. For example, in case of a building, the deciding factor is time. In case of leased assets, the deciding factor is the lease period. For plant and machinery, the deciding factor should be production as well as time. There can be many factors, but the life of assets should be ascertained on some reasonable basis.

Why Do We Need to Account for Depreciation?

Here is why we need to provide depreciation:

- To ascertain the true profit during a year, it is desirable to charge depreciation.
- To ascertain the true value of assets, depreciation should be charged. Without calculating the correct value of assets, we cannot ascertain the true financial position of a company.
- Instead of withdrawal of overstated profit, it is desirable to make provisions to buy new assets to replace old asset. The accumulated value of depreciation provides additional working capital.
- Depreciation helps in ascertaining uniform profit in each accounting year.
- Depreciation allows to take the advantage of tax benefit.

Accounting Entries Related to Assets and Depreciation

Let us see the accounting entries related to assets and depreciation:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Particulars</th>
<th>Journal Entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchase of Fixed Assets</td>
<td>Asset A/c Dr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To Bank A/c</td>
</tr>
<tr>
<td>2</td>
<td>Expenses on purchase of Fixed Assets</td>
<td>Related Asset A/c Dr.</td>
</tr>
</tbody>
</table>
To Cash/Bank A/c

3. For Providing depreciation
   Depreciation A/c
   To Assets A/c
   Dr.

4. Transfer of depreciation to Profit & Loss a/c
   Profit & Loss A/c
   To Depreciation A/c
   Dr.

5. Sale of Assets
   Bank A/c
   To Assets A/c
   Dr.

Depreciation = \[
\text{Cost of Assets - Scrap Value of Assets} \div \text{Estimated Life of Assets}
\]

Method of Depreciation

Depreciation can be calculated using any of the following methods, however the most popular methods remain (a) Straight Line Method and (b) Written Down Value Method.

- Straight Line Method
- Written Down Value Method
- Annuity Method
- Insurance Policy Method
- Machine Hour Rate Method
- Depletion Method
- Revaluation Method
- Depreciation Fund Method

Format

<table>
<thead>
<tr>
<th>Desc.</th>
<th>Opening Value</th>
<th>Addition during the year</th>
<th>Sale</th>
<th>Balance</th>
<th>Rate of Depreciation</th>
<th>Value of Depreciation</th>
<th>Closing Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>
Format of ledger accounts

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars</th>
<th>L.F.</th>
<th>Amt</th>
<th>Date</th>
<th>Particulars</th>
<th>L.F.</th>
<th>Amt</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-06-13</td>
<td>To Bank</td>
<td>xxx</td>
<td></td>
<td>31-03-2014</td>
<td>By Depreciation</td>
<td>xx</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Balance c/d</td>
<td>xx</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>xxx</td>
<td></td>
<td></td>
<td>Total</td>
<td>xxx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01-04-2014</td>
<td>To Balance</td>
<td>xx</td>
<td></td>
<td></td>
<td>By Depreciation</td>
<td>xx</td>
<td></td>
</tr>
</tbody>
</table>

Cost Accounting - Introduction

Cost accounting is the application of accounting and costing principles, methods, and techniques in the ascertainment of costs and the analysis of saving or excess cost incurred as compared with previous experience or with standards.

...Wheldon.

Concepts of Cost Accounting

Following are the main concepts of cost accounting:

**Cost**

There is a cost involved to purchase or produce anything. Costs may be different for the same product, depending upon the stages of completion. The cost changes according to the stage a product is in, for example, raw material, work in progress, finished goods, etc. The cost of a product cannot be perfect and it may vary for the same product depending upon different constraints and situations of production and market.

**Expenses**

Some costs are actual, such as raw material cost, freight cost, labor cost, etc. Some expenses are attributable to cost. To earn revenue, some expenses are incurred like rent, salary, insurance, selling & distribution cost, etc. Some expenses are variable, some are semi-variable, and some of fixed nature.
Loss
Expenses are incurred to obtain something and losses are incurred without any compensation. They add to the cost of product or services without any value addition to it.

Cost Center
Cost center refers to a particular area of activity and there may be multiple cost centers in an organization. Every cost center adds some cost to the product and every cost center is responsible for all its activity and cost. A cost center may also be called a department or a sub-department. There are three types of cost centers:

- **Personal and Impersonal Cost Centers** - A group of persons in an organization responsible as a whole for a group activity is called a personal cost center. In case of impersonal call center, the activities are done with the help of plant and machinery.

- **Operation and Process Cost Centers** - The same kind of activity is done in an operation department. In a process cost center, as the name suggests, different kinds of processes are involved.

- **Product and Service Cost Centers** - A department where all activities refer to product is called a product department. When the centers render their services to a product department for its smooth functioning, they are called service cost centers.

Profit Center
Profit centers are inclusive of cost centers as well as revenue activities. Profit centers set targets for cost centers and delegates responsibilities to cost centers. Profit centers adopt policies to achieve such targets. Profit centers play a vital role in an organization.

Cost Drivers
Cost of any product depends upon cost drivers. There may be different types of cost drivers such as number of units or types of products required to produce. If there is any change in cost driver, the cost of product changes automatically.

Conversion Cost
The cost required to convert raw material into product is called as conversion cost. It includes labor, direct expenses, and overhead.

Carrying Costs
Carrying cost represents the cost to maintain inventory, lock up cost of inventory, store rent, and store operation expenses.
Out of Stock Cost
Sometimes loss is incurred due to shortage of stock such as loss in sale, loss of goodwill of a business or idle machine. It is called out of stock cost.

Contribution Margin
Contribution margin is the difference between sale price and variable cost.

Ordering Costs
Ordering costs represent the cost to place an order, up to to stage until the material is included as inventory.

Development Cost
To develop new product, improve existing product, and improved method in producing a product called development cost.

Policy Cost
The cost incurred to implement a new policy in addition to regular policy is called policy cost.

Idle Facilities Cost and Idle Capacity Cost
If available facilities remain idle and some loss incurred due to it, it is called idle facilities cost. If capacity is unused due to repair, shut down or any other reason, it is called capacity cost.

Expired Cost
When the cost is fully consumed and no future monetary value could be measured, it is called expired cost. Expired cost relates to current cost. Suppose the expenses incurred in an accounting period do not have any future value, then it is called an expired cost.

Incremental Revenue
Incremental revenue implies the difference in revenues between two alternatives. While assessing the profitability of a proposed alternative, incremental revenues are compared with incremental costs.

Added Value
Added value means value addition to any product. Value addition of the product may be due to some process on product or to make the product available or there may be other reasons; but it also includes the profit share on it.
Urgent Cost
There are some expenses that are to be incurred on an immediate basis. Delaying such expenses may result in loss to business. These expenses are called urgent cost. Urgent costs are not be postponed.

Postponable Cost
Without avoiding any expenses, if we are able to defer some expenses to future, then it is called a postponable cost.

Pre-production Cost
The cost incurred before commencing formal production or at the time of formation of new establishment or project is called pre-production cost. Some of these costs are of capital nature and some of these are called deferred revenue expenditure.

Research Cost
Research costs are incurred to discover a new product or to improve an existing product, method, or process.

Training Cost
The costs incurred on teaching, training, apprentice of staff or worker inside or outside the business premise to improve their skills is called training cost.

Cost Accounting - Advantages
The advantages of cost accounting are:

Disclosure of profitable and unprofitable activities
Since cost accounting minutely calculates the cost, selling price and profitability of product, segregation of profitable or unprofitable items or activities becomes easy.

Guidance for future production policies
On the basis of data provided by costing department about the cost of various processes and activities as well as profit on it, it helps to plan the future.

Periodical determination of profit and losses
Cost accounting helps us to determine the periodical profit and loss of a product.

To find out exact cause of decrease or increase in profit
With the help of cost accounting, any organization can determine the exact cause of decrease or increase in profit that may be due to higher cost of product, lower selling price or may be due to unproductive activity or unused capacity.

**Control over material and supplies**

Cost accounting teaches us to account for the cost of material and supplies according to department, process, units of production, or services that provide us a control over material and supplies.

**Relative efficiency of different workers**

With the help of cost accounting, we may introduce suitable plan for wages, incentives, and rewards for workers and employees of an organization.

**Reliable comparison**

Cost accounting provides us reliable comparison of products and services within and outside an organization with the products and services available in the market. It also helps to achieve the lowest cost level of product with highest efficiency level of operations.

**Helpful to government**

It helps the government in planning and policy making about import, export, industry and taxation. It is helpful in assessment of excise, service tax and income tax, etc. It provides readymade data to government in price fixing, price control, tariff protection, etc.

**Helpful to consumers**

Reduction of price due to reduction in cost passes to customer ultimately. Cost accounting builds confidence in customers about fairness of price.

**Classification and subdivision of cost**

Cost accounting helps to classify the cost according to department, process, product, activity, and service against financial accounting which give just consolidate net profit or loss figure of any organization without any classification or sub-division of cost.

**To find out adequate selling price**

In tough marketing conditions or in slump period, the costing helps to determine selling price of the product at the optimum level, neither too high nor too low.
Proper investment in inventory

Shifting of dead stock items or slow moving items into fast moving items may help company to invest in more proper and profitable inventory. It also helps us to maintain inventory at the most optimum level in terms of investments as well as variety of the stock.

Correct valuation of inventory

Cost accounting is an accurate and adequate valuation technique that helps an organization in valuation of inventory in more reliable and exact way. On the other hand, valuation of inventory merely depends on physical stock taking and valuation thereof, which is not a proper and scientific method to follow.

Decision on manufacturing or purchasing from outside

Costing data helps management to decide whether in-house production of any product will be profitable, or it is feasible to purchase the product from outside. In turn, it is helpful for management to avoid any heavy loss due to wrong decision.

Reliable check on accounting

Cost accounting is more reliable and accurate system of accounting. It is helpful to check results of financial accounting with the help of periodic reconciliation of cost accounts with financial accounts.

Budgeting

In cost accounting, various budgets are prepared and these budgets are very important tools of costing. Budgets show the cost, revenue, profit, production capacity, and efficiency of plant and machinery, as well as the efficiency of workers. Since the budget is planned in scientific and systemic way, it helps to keep a positive check over misdirecting the activities of an organization.

Cost Accounting vs Financial Accounting

Both cost accounting and financial accounting help the management formulate and control organization policies. Financial management gives an overall picture of profit or loss and costing provides detailed product-wise analysis.

No doubt, the purpose of both is same; but still there is a lot of difference in financial accounting and cost accounting. For example, if a company is dealing in 10 types of products, financial accounting provides information of all the products...
in totality under different categories of expense heads such as cost of material, cost of labor, freight charges, direct expenses, and indirect expenses. In contrast, cost accounting gives details of each overhead product-wise, such as much material, labor, direct and indirect expenses are consumed in each unit. With the help of costing, we get product-wise cost, selling price, and profitability.

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

<table>
<thead>
<tr>
<th>Point of Differences</th>
<th>Financial Accounting</th>
<th>Cost Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td>Purpose</td>
<td>Purpose of the financial statement is to show correct financial position of the organization.</td>
<td>To calculate cost of each unit of product on the basis of which we can take accurate decisions.</td>
</tr>
<tr>
<td>Recording</td>
<td>Estimation in recording of financial transactions is not used. It is based on actual transactions only.</td>
<td>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.</td>
</tr>
<tr>
<td>Controlling</td>
<td>Correctness of transaction is important without taking care of cost control.</td>
<td>Cost accounting done with the purpose of control over cost with the help of costing tools like standard costing and budgetary control.</td>
</tr>
<tr>
<td>Period</td>
<td>Period of reporting of financial accounting is at the end of financial year.</td>
<td>Reporting under cost accounting is done as per the requirement of management or as-and-when-required basis.</td>
</tr>
<tr>
<td><strong>Reporting</strong></td>
<td>In financial accounting, costs are recorded broadly.</td>
<td>In cost accounting, minute reporting of cost is done per-unit wise.</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Fixation of Selling Price</strong></td>
<td>Fixation of selling price is not an objective of financial accounting.</td>
<td>Cost accounting provides sufficient information, which is helpful in determining selling price.</td>
</tr>
<tr>
<td><strong>Relative Efficiency</strong></td>
<td>Relative efficiency of workers, plant, and machinery cannot be determined under it.</td>
<td>Valuable information about efficiency is provided by cost accountant.</td>
</tr>
<tr>
<td><strong>Valuation of Inventory</strong></td>
<td>Valuation basis is ‘cost or market price whichever is less’</td>
<td>Cost accounting always considers the cost price of inventories.</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>Journal entries, ledger accounts, trial balance, and financial statements</td>
<td>Cost of sale of product(s), addition of margin and determination of selling price of the product.</td>
</tr>
</tbody>
</table>

### Cost Accounting - Classification of Cost

Costs can be classified based on the following attributes:

**By Nature**

In this type, material, labor and overheads are three costs, which can be further sub-divided into raw materials, consumables, packing materials, and spare parts etc.

**By Degree of Traceability of the Product**

Direct and indirect expenses are main types of costs come under it. Direct expenses may directly attributable to a particular product. Leather in shoe manufacturing is a direct expenses and salaries, rent of building etc. come under indirect expenses.

**By Controllability**

In this classification, two types of costs fall:

- **Controllable** - These are controlled by management like material labour and direct expenses.
- **Uncontrollable** - They are not influenced by management or any group of people. They include rent of a building, salaries, and other indirect expenses.

**By Relationship with Accounting Period**
Classifications are measured by the period of use and benefit. The capital expenditure and revenue expenditure are classified under it. Revenue expenses relate to current accounting period. Capital expenditures are the benefits beyond accounting period. Fixed assets come under category of capital expenditure and maintenance of assets comes under revenue expenditure category.

**By Association with the Product**
There are two categories under this classification:

- **Product cost** - Product cost is identifiable in any product. It includes direct material, direct labor and direct overheads. Up to sale, these products are shown and valued as inventory and they form a part of balance sheet. Any profitability is reflected only when these products are sold. The Costs of these products are transferred to costs of goods sold account.

- **Time/Period base cost** - Selling expenditure and Administrative expenditure, both are time or period based expenditures. For example, rent of a building, salaries to employees are related to period only. Profitability and costs are depends on both, product cost and time/period cost.

**By Functions**
Under this category, the cost is divided by its function as follows:

- **Production Cost** - It represents the total manufacturing or production cost.

- **Commercial cost** - It includes operational expenses of the business and may be subdivided into administration cost, and selling and distribution cost.

**By Change in Activity or Volume**
Under this category, the cost is divided as fixed, variable, and semi-variable costs:

- **Fixed cost** - It mainly relates to time or period. It remains unchanged irrespective of volume of production like factory rent, insurance, etc. The cost per unit fluctuates according to the production. The cost per unit decreases if production increases and cost per unit increases if the production decreases. That is, the cost per unit is inversely proportional to the production. For example, if the factory rent is Rs 25,000 per month and the number of units produced in that month is 25,000, then the cost of rent per
unit will be Rs 1 per unit. In case the production increases to 50,000 units, then the cost of rent per unit will be Rs 0.50 per unit.

- **Variable cost** - Variable cost directly associates with unit. It increases or decreases according to the volume of production. Direct material and direct labor are the most common examples of variable cost. It means the variable cost per unit remains constant irrespective of production of units.

- **Semi-variable cost** - A specific portion of these costs remains fixed and the balance portion is variable, depending on their use. For example, if the minimum electricity bill per month is Rs 5,000 for 1000 units and excess consumption, if any, is charged @ Rs 7.50 per unit. In this case, fixed electricity cost is Rs 5,000 and the total cost depends on the consumption of units in excess of 1000 units. Therefore, the cost per unit up to a certain level changes according to the volume of production, and after that, the cost per unit remains constant @ Rs 7.50 per unit.

**Cost Accounting - Elements of Cost**

The following chart shows the various elements of cost and how they are classified.

![Cost Accounting Chart]

**Direct or Indirect Materials**

The materials directly contributed to a product and those easily identifiable in the finished product are called direct materials. For example, paper in books, wood in furniture, plastic in water tank, and leather in shoes are direct materials. They are
also known as high-value items. Other lower cost items or supporting material used in the production of any finished product are called indirect material. For example, nails in shoes or furniture.

**Direct Labor**

Any wages paid to workers or a group of workers which may directly co-relate to any specific activity of production, supervision, maintenance, transportation of material, or product, and directly associate in conversion of raw material into finished goods are called direct labor. Wages paid to trainee or apprentices does not comes under category of direct labor as they have no significant value.

**Overheads**

Indirect expenses are called overheads, which include material and labor. Overheads are classified as:

- Production or manufacturing overheads
- Administrative expenses
- Selling Expenses
- Distribution expenses
- Research and development expenses

**Cost Accounting - 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.

**Format**

<table>
<thead>
<tr>
<th>COST SHEET OR STATEMENT OF COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Units........</td>
</tr>
<tr>
<td>Opening Stock of Raw material</td>
</tr>
<tr>
<td>... ... ...</td>
</tr>
<tr>
<td>... ... ...</td>
</tr>
</tbody>
</table>
Cost Accounting - Cost Control

Conceptually, accounting is the discipline that provides information on which external and internal users of the information may base decision that result in the allocation of economic resource in society.

Accounting provides business-related information to the owner, the management, the employees of the company as well as to the government, creditors, investors, and customers.

Financial accounting is based on actual past and cost accounting is based on planning and controlling. Preparation of budget is a part of planning and controlling relates to putting a check on the actual function of planning. Comparison of budgeted with actual performance provide the management an idea to eliminate weak performances.

Cost Control Techniques
Costs can be controlling by employing the following methods:

- Material Control
- Labor Control
- Overheads Control
- Standard costing
- Budgetary Control
- Capital Expenditure Control
- Productivity and Accounting Ratios

Requirements for Successful Cost Control

The following requirements are to be fulfilled to implement successful cost control:

- A plan and a set of well-defined responsibilities to all executives are essential.
- Clear definition of tasks for performance and cost to execute those tasks.
- A fixed responsibility, in case of deviation between targeted and actual.
- Prompt collection of performance data from each department of an organization as the delay in information equals to no information and the management is unable to take correct decision due to lack of complete information.
- Highlights of good and bad, both performances to enable the management to take corrective steps.
- Reward for good performances and Punishment for the poor ones.

Cost Accounting - Cost Reduction

Cost reduction is to be understood as the achievement of real and permanent reduction in the unit cost of goods manufactured or services rendered without impairing their suitability for the use intended or diminution in the quality of product.

... The institute of Management Accountants, London

There are only two ways to maximize profit of any organization: either to increase sale price of unit, or to reduce cost of that unit. Both above cases may result into gaining good profit. As we are seeing today, most of the businesses are facing tough competitive market situation where increase in sale price may result in to loss of sale. Increasing sale price is possible only in case of those products where the company is dealing in monopoly items and we all are aware that this situation cannot prolong for any company and its products. Therefore, cost reduction is only one scientific way to deal with this situation; provided it is real and permanent.
Cost reduction should not be the result of any temporary decrement in cost of raw material, change in government polices etc. and most importantly, reduction of cost should not be on price of quality of that product.

Reduction of cost should be in the following manner:

- Volume of production should be same but cost of expenditure should be reduced.
- Without changing level of production there should be increase in production.

**Cost Reduction Program**

Followings are the essentials of a cost reduction program:

- Cost reduction program should be according to requirement of the company.
- Cost reduction program is a continuous activity that cannot be treated as one time or short term activity. Success of any cost reduction program may lie in only continuous improvement of efforts.
- Cost reduction program should be real and permanent.
- Example setter of cost reduction program should be top management employee. Success of this program depends on co-operation of all employees and department of an organization.
- Employees should be rewarded for their participation in cost reduction program and for giving innovative ideas related to this program.

**Fields Covered under the Cost Reduction Program**

A number of fields come under the scope of cost reduction. They are discussed below.

**Design**

Manufacturing of any product starts with the design of product. At the time of improvement in design of old product as well as at the time of designing new product, some investment is recommended to find a useful design that may reduce the cost of the product in following terms:

**Material Cost**

Design of product should encourage to find out possibility of cheaper raw material as a substitute, maximum production, less quantity etc.

**Labor Cost**
Design of product may reduce time of operation, cost of after-sale service, minimum tolerance, etc.

**Organization**

Employees should be encouraged for cost reduction scheme. There should be no scope for doubts and frictions; there should be no communication gap between any department or any level of management; and there must be proper delegation of responsibilities with defined area of functions of an organization.

**Factory Layout and Equipment**

There should be a proper study about unused utilization of material, manpower and machines, maximum utilization of all above may reduce cost of any product effectively.

**Administration**

An organization should make efforts to reduce the cost of administrative expenses, as there is ample scope to do so. A company may evaluate and reduce the cost of following expenses, but not the cost of efficiency:

- Telephone expenses
- Travelling expenses
- Salary by reducing staff
- Reduction in cost of stationery
- Postage and Telegrams

**Marketing**

Following areas can be covered under the cost reduction program:

- Advertisement
- Warehouse
- Sales Promotion
- Distribution Expenses
- Research & Development Program

Any cost accountant should keep the following points in mind while focusing on cost reduction for the Marketing segment:

- Check the distribution system of an organization about the overall efficiency of the system and how economically that system is working.
• Find out the efficiency of the sales promotion system

• Find out if the costs can reduced from the sales and distribution system of an organization and whether the research and development system of market is sufficient.

• A cost accountant should also do an ABC analysis of customers in which customers may be divided into three categories. For example:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Dispatches</th>
<th>Volume of Sale Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer...A</td>
<td>About 10%</td>
<td>60% to 80%</td>
</tr>
<tr>
<td>Customer...B</td>
<td>About 20%</td>
<td>20% to 30%</td>
</tr>
<tr>
<td>Customer...C</td>
<td>About 70%</td>
<td>5% to 10%</td>
</tr>
</tbody>
</table>

After performing this analysis, the organization can focus on the customers who are covering most of the sales volume. According to it, the cost reduction program may be run successfully in the area of category B and C.

Financial Management
Attention should be given to the following areas:

• If there is any over-investment.

• How much economical is the cost of capital received?

• If the organization is getting maximum returns for the capital employed.

• If there is any over-investment, that should be sold and similarly, unutilized fixed assets should be eliminated. Slow-moving or non-moving inventories should be removed and should transfer this surplus to the working capital to re-invest it in a cycle of more profitable area of business.

Personal Management
Cost reduction programs can be run using staff welfare measures and improving labor relation. Introduction of incentive schemes for labor and giving them better working conditions is very important to run an efficient cost reduction program.

Material Control
Cost reduction program should be run by purchasing economical and more useful material. Economic Order Quantity (EOQ) technique should be used. Inventory should be kept low. Proper check on inward material, control over warehouse and proper issuance of material, and effective material yield should be done.

Production

Using effective control over material, labor, and machine a better cost reduction program may be run.

Tools and Techniques of Cost Reduction

The following tools and techniques are used to reduce costs:

- Budgetary Control
- Standard Costing
- Simplification and Variety Reduction
- Planning and Control of Finance
- Cost Benefit Analysis
- Value Analysis
- Contribution Analysis
- Job Evaluation and Merit Rating
- Improvement in Design
- Material Control
- Labor Control
- Overhead Control
- Market Research

Cost Accounting - Budgeting Analysis

We are all well-familiar with the term budget. Budgeting is a powerful tool that helps the management in performing its functions such as planning, coordinating, and controlling the operations efficiently. The definition of budget is,

A plan quantified in monetary terms prepared and approved prior to a define period of time usually showing planned income to be generated and/or expenditure to be incurred during the period and the capital to be employed to attain a given objective.

---CIMA, England

Budget, Budgeting, and Budgetary Control

Let us go through the terms sequentially.
Budget

Budget represents the objectives of any organization that is based on the implication of forecast and related to planned activities.

Budget is neither an estimate nor a forecast because an estimation is a predetermination of future events, may be based on simple guess or any scientific principles.

Similarly, a forecast may be an anticipation of events during a specified period of time. A forecast may be for a specific activity of the company. We normally forecast likely events such as sales, production, or any other activity of the organization.

On the other hand, budget relates to planned policy and program of the organization under planed conditions. It represents the action according to a situation which may or may not take place.

Budgeting

Budgeting represents the formation of the budget with the help and coordination of all or the various departments of the firm.

Budgetary Control

Budgetary control is a tool for the management to allocate responsibility and authority in planning for future and to develop a basis of measurement to evaluate the efficiency of operations.

A budget is a plan of the policy to be pursued during a defined time period. All the actions are based on planning of budget because budget is prepared after studying all the related activities of the company. Budget gives a communication ground to the top management with the staff of the firm who are implementing the policies of the top management.

Budgetary control helps in coordinating the economic trends, financial position, policies, plans, and actions of an organization.

Budgetary control also helps the management to ensure and control the plan and activities of the organization. Budgetary control makes it possible by continuous comparison of actual performance with that of the budgets.

Budgets are the individual objectives of a department whereas budgeting may be said to be the act of building budgets. Budgetary Control embraces all this and in addition, includes the science of planning the budgets themselves and utilization of such budget to effect an overall management tool for the business planning and control.

...Rowland and William
Types of Budgets

Budgets can be categorized in various ways. Let us go through the types of budgets in detail.

**Functional Budgets**

It relates to any function of the firm such as sales, production, cash, etc. Following budgets are prepared in functional budgets:

- Sales Budget
- Production Budget
- Material Budget
- Manufacturing Budget
- Administrative Cost Budget
- Plant Utilization Budget
- Capital Expenditure Budget
- Research and Development Cost Budget
- Cash Budget

**Master Budget or Summarized Budget or Finalized Profit plan**

This budget is very useful for the top management of the company because it covers all the information in a summarized manner.

**Fixed Budget**

It is a rigid budget and is drawn on the assumption that there will be no change in the budget level.

**Flexible Budget**

It is also called a sliding scale budget. It is useful in:

- the new organizations where it is difficult to foresee,
- the firms where activity level changes due to seasonal nature or change in demand,
- the industries based on change of fashion,
- the units which keep on introducing new products, and
- the firms which are engaged in ship-building business.
**Zero Base Budgeting**

Zero base budgeting is not based on the incremental approach; previous year figures are not adopted as base.

CIMA has defined it as:

As a method of budgeting, where all activities are revaluated each time a budget is set, discrete levels of each activity are valued and combination is chosen to match the funds available.

**Control Ratios**

Following ratios are used to evaluate the deviations of the actual performance from the budgeted performance. If the ratio is 100% or more, it represents favorable results and vice-a-versa.

\[
\text{Capacity Ratio} = \frac{\text{Actual hours worked}}{\text{Budgeted hours}}
\]

\[
\text{Activity Ratio} = \frac{\text{Standard hours for actual production}}{\text{Budgeted hours}} \times 100
\]

\[
\text{Efficiency Ratio} = \frac{\text{Standard hours for actual production}}{\text{Actual hours worked}} \times 100
\]

\[
\text{Calendar Ratio} = \frac{\text{Number of actual working days in a period}}{\text{Number of working days in the budgeted period}} \times 100
\]

**Flexible Budget Vs. Fixed Budget**

<table>
<thead>
<tr>
<th>Points</th>
<th>Flexible Budget</th>
<th>Fixed Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>Due to its nature of flexibility, it may be quickly re-organized according to the level of production.</td>
<td>After the commencement of a period, fixed budget cannot change according to actual production.</td>
</tr>
</tbody>
</table>
Flexible Budget

Flexible budget provides logical comparison. The actual cost at the actual activity is compared with the budgeted cost at the time of preparing a flexible budget. Flexibility recognizes the concept of variability.

Flexible budget helps in assessing the performance of departments in relation to the activity level achieved. Cost ascertainment is possible at different levels of activities. It is also useful in fixation of price and preparation of quotations.

Example

With the help of the following given expenses, prepare a budget for production of 10,000 units. Prepare flexible budgets for 5,000 and 8,000 units.

<table>
<thead>
<tr>
<th>Costs</th>
<th>Price per Unit(Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>75</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Condition</th>
<th>Flexible budget may change according to change in conditions.</th>
<th>Fixed budget is based on the assumption that conditions will remain unchanged.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Classification</td>
<td>Classification of costs is done according to the nature of their variability.</td>
<td>It is suitable for fixed costs only; no classification is done in fixed budget.</td>
</tr>
<tr>
<td>Comparison</td>
<td>Comparisons of actual figures with revised standard figures are done according to change in the production level of a concern.</td>
<td>If there is change in production level, then it is not possible to do a correct comparison.</td>
</tr>
<tr>
<td>Ascertainment of cost</td>
<td>It is easy to ascertain costs even at different levels of activity.</td>
<td>If there is change in the production level or circumstances, it is not possible to ascertain costs correctly.</td>
</tr>
<tr>
<td>Cost Control</td>
<td>It is used as an effective tool to control costs.</td>
<td>Due to its limitations, it is not used as cost control tool.</td>
</tr>
<tr>
<td>Particulars</td>
<td>Output 5000 units</td>
<td>Output 5000 units</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>Rate(Rs)</td>
<td>Amount</td>
</tr>
<tr>
<td><strong>Variable or Product Expenses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>75.00</td>
<td>3,75,000</td>
</tr>
<tr>
<td>Labour</td>
<td>20.00</td>
<td>1,00,000</td>
</tr>
<tr>
<td>Direct Variable Overheads</td>
<td>6.00</td>
<td>30,000</td>
</tr>
<tr>
<td><strong>Prime Cost</strong></td>
<td>101.00</td>
<td>5,05,000</td>
</tr>
<tr>
<td><strong>Factory Overheads</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Solution**

Labor  
Variable Factory Overheads  
Fixed Factory Overheads (Rs 50,000)  
Variable Expenses (Direct)  
Selling Expenses (20% Fixed)  
Distribution Expenses (10% fixed)  
Administrative Expenses (Rs 70,000)  
Total cost of Sale per unit 158
<table>
<thead>
<tr>
<th>Particulars</th>
<th>Output 5000 units</th>
<th>Output 5000 units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate(Rs)</td>
<td>Amount</td>
</tr>
<tr>
<td>Variable Overheads</td>
<td>15.00</td>
<td>75,000</td>
</tr>
<tr>
<td>Fixed Overheads</td>
<td>10.00</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>Work Cost</strong></td>
<td><strong>126.00</strong></td>
<td><strong>6,30,000</strong></td>
</tr>
<tr>
<td>Fixed Administrative Expenses</td>
<td>14.00</td>
<td>70,000</td>
</tr>
<tr>
<td><strong>Cost of Production</strong></td>
<td><strong>140.00</strong></td>
<td><strong>7,00,000</strong></td>
</tr>
<tr>
<td>Selling Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed 20% of Rs.20/-</td>
<td>8.00</td>
<td>40,000</td>
</tr>
<tr>
<td>Variable Cost 80% of Rs.20/-</td>
<td>16.00</td>
<td>80,000</td>
</tr>
<tr>
<td>Distributed Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed 10% of Rs.10/-</td>
<td>2.00</td>
<td>10,000</td>
</tr>
<tr>
<td>Variable 90% of Rs.10/-</td>
<td>9.00</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>Total Cost of Sale</strong></td>
<td><strong>175.00</strong></td>
<td><strong>8,75,000</strong></td>
</tr>
</tbody>
</table>

**Cash Budget**

Cash budget comes under the category of financial budget. It is prepared to calculate budgeted cash flows (inflows and outflows) during a specific period of time. Cash budget is useful in determining the optimum level of cash to avoid excessive cash or shortage of cash, which may arise in future.
With the help of cash budget, we can arrange cash through borrowing funds in case of shortage, and we may invest cash if it is present in excess.

It is necessary for every business to keep a safe level of cash. Being a part of master budget, the following tasks are included in a cash budget:

- Collection of Cash
- Cash Payments
- Selling Expenses and administrative expensive budget

**Format**

If a firm wants to maintain cash balance of Rs 50,000 and in case of shortage the firm borrows funds from Bank, following cash budget is prepared:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Q-1</th>
<th>Q-2</th>
<th>Q-3</th>
<th>Q-4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opening Cash Balance</strong></td>
<td>40,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,500</td>
<td>40,000</td>
</tr>
<tr>
<td>Add: Cash receipts</td>
<td>80,000</td>
<td>1,00,000</td>
<td>90,000</td>
<td>1,25,000</td>
<td>3,95,000</td>
</tr>
<tr>
<td><strong>Total available Cash (A)</strong></td>
<td>1,20,000</td>
<td>1,50,000</td>
<td>1,40,000</td>
<td>1,75,500</td>
<td>4,35,000</td>
</tr>
</tbody>
</table>

Less: Cash Payments:

<table>
<thead>
<tr>
<th></th>
<th>Q-1</th>
<th>Q-2</th>
<th>Q-3</th>
<th>Q-4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Material</td>
<td>30,000</td>
<td>40,000</td>
<td>38,000</td>
<td>42,000</td>
<td>1,50,000</td>
</tr>
<tr>
<td>Direct Labour</td>
<td>12,000</td>
<td>15,000</td>
<td>14,000</td>
<td>16,000</td>
<td>57,000</td>
</tr>
<tr>
<td>Factory Overheads</td>
<td>18,000</td>
<td>19,000</td>
<td>17,000</td>
<td>20,000</td>
<td>74,000</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>16,000</td>
<td>16,000</td>
<td>16,000</td>
<td>16,000</td>
<td>64,000</td>
</tr>
<tr>
<td>Particulars</td>
<td>Q-1</td>
<td>Q-2</td>
<td>Q-3</td>
<td>Q-4</td>
<td>Total</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Selling &amp; Distribution Exp.</td>
<td>9,000</td>
<td>10,000</td>
<td>11,000</td>
<td>12,000</td>
<td>42,000</td>
</tr>
<tr>
<td>Purchase of Fixed Assets</td>
<td>-</td>
<td>-</td>
<td>40,000</td>
<td>-</td>
<td>40,000</td>
</tr>
<tr>
<td>Total Cash Payments (B)</td>
<td>85,000</td>
<td>1,00,000</td>
<td>1,36,000</td>
<td>1,06,000</td>
<td>4,27,000</td>
</tr>
<tr>
<td>Cash in hand C (A-B)</td>
<td>35,000</td>
<td>50,000</td>
<td>4,000</td>
<td>69,500</td>
<td>8,000</td>
</tr>
<tr>
<td>Financing Activities:</td>
<td>15,000</td>
<td>-</td>
<td>50,000</td>
<td>-</td>
<td>65,000</td>
</tr>
<tr>
<td>Borrowings</td>
<td>-</td>
<td>-3,000</td>
<td>-18,000</td>
<td>-</td>
<td>-21,000</td>
</tr>
<tr>
<td>Repayments of Borrowings</td>
<td>-</td>
<td>-500</td>
<td>-1,500</td>
<td>-</td>
<td>-2,000</td>
</tr>
<tr>
<td>Interest paid</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Net Cash Flows from financing</td>
<td>23,000</td>
<td>0</td>
<td>46,500</td>
<td>-19,500</td>
<td>50,000</td>
</tr>
<tr>
<td>Activities (D)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Closing Cash Balance E (C+D)</td>
<td>58,000</td>
<td>50,000</td>
<td>50,500</td>
<td>50,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>

Cost Accounting - Marginal Costing
Marginal cost is the change in the total cost when the quantity produced is incremented by one. That is, it is the cost of producing one more unit of a good. For example, let us suppose:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable cost per unit</td>
<td>Rs 25</td>
</tr>
<tr>
<td>Fixed cost</td>
<td>Rs 1,00,000</td>
</tr>
<tr>
<td>Cost of 10,000 units</td>
<td>25 × 10,000 = Rs 2,50,000</td>
</tr>
<tr>
<td>Total Cost of 10,000 units</td>
<td>1,00,000 + 2,50,000 = Rs 3,50,000</td>
</tr>
<tr>
<td>Total cost of 10,001 units</td>
<td>1,00,000 + 2,50,025 = Rs 3,50,025</td>
</tr>
<tr>
<td>Marginal Cost</td>
<td>3,50,025 – 3,50,000 = Rs 25</td>
</tr>
</tbody>
</table>

### Need for Marginal Costing

Let us see why marginal costing is required:

- Variable cost per unit remains constant; any increase or decrease in production changes the total cost of output.
- Total fixed cost remains unchanged up to a certain level of production and does not vary with increase or decrease in production. It means the fixed cost remains constant in terms of total cost.
- Fixed expenses exclude from the total cost in marginal costing technique and provide us the same cost per unit up to a certain level of production.

### Features of Marginal Costing

Features of marginal costing are as follows:

- Marginal costing is used to know the impact of variable cost on the volume of production or output.
- Break-even analysis is an integral and important part of marginal costing.
- Contribution of each product or department is a foundation to know the profitability of the product or department.
- Addition of variable cost and profit to contribution is equal to selling price.
- Marginal costing is the base of valuation of stock of finished product and work in progress.
- Fixed cost is recovered from contribution and variable cost is charged to production.
- Costs are classified on the basis of fixed and variable costs only. Semi-fixed prices are also converted either as fixed cost or as variable cost.
Ascertainment of Profit under Marginal Cost

‘Contribution’ is a fund that is equal to the selling price of a product less marginal cost. Contribution may be described as follows:

| Contribution | = Selling Price – Marginal Cost |
| Contribution | = Fixed Expenses + Profit |
| Contribution – Fixed Expenses | = Profit |

Income Statement under Marginal Costing

<table>
<thead>
<tr>
<th>Income Statement</th>
<th>For the year ended 31-03-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulars</td>
<td>Amount</td>
</tr>
<tr>
<td>Sales</td>
<td></td>
</tr>
<tr>
<td>Less: Variable Cost:</td>
<td></td>
</tr>
<tr>
<td>Cost of goods manufactured</td>
<td>12,00,000</td>
</tr>
<tr>
<td>Variable Selling Expenses</td>
<td>3,00,000</td>
</tr>
<tr>
<td>Variable Administration Expenses</td>
<td>50,000</td>
</tr>
<tr>
<td>Contribution</td>
<td>9,50,000</td>
</tr>
<tr>
<td>Less: Fixed Cost:</td>
<td></td>
</tr>
<tr>
<td>Fixed Administration Expenses</td>
<td>70,000</td>
</tr>
<tr>
<td>Fixed Selling Expenses</td>
<td>1,30,000</td>
</tr>
</tbody>
</table>
Advantages of Marginal Costing

The advantages of marginal costing are as follows:

- Easy to operate and simple to understand.
- Marginal costing is useful in profit planning; it is helpful to determine profitability at different level of production and sale.
- It is useful in decision making about fixation of selling price, export decision and make or buy decision.
- Break even analysis and P/V ratio are useful techniques of marginal costing.
- Evaluation of different departments is possible through marginal costing.
- By avoiding arbitrary allocation of fixed cost, it provides control over variable cost.
- Fixed overhead recovery rate is easy.
- Under marginal costing, valuation of inventory done at marginal cost. Therefore, it is not possible to carry forward illogical fixed overheads from one accounting period to the next period.
- Since fixed cost is not controllable in short period, it helps to concentrate in control over variable cost.

Cost Accounting - Standard Costing

Planned cost is a key for effective cost control which is not provided by historical cost concepts. The standard costing system was developed to overcome the drawbacks of the historical costing system. Since historical costing deals only with the actual costs incurred, it is not an effective device of cost control.

Standard costing tells us what should be the cost of the product and if the actual cost exceeds the projected cost, the standard costing system can point to the reason of deviation.

Points Related to Standard Costing

- Standard costing includes pre-determination of costs under specific working conditions.
- In this process, the standard quantity of machine time, labor time, and material is calculated and the future market trend for price standards is analyzed.
- Standard costing helps in variance analysis.
- Along with fixation of sale price, it also provides valuation of stock and work in progress.
- Material, labor, and overheads cost are ascertained.
- Actual cost is measured.

**Standard Cost Card Format**

<table>
<thead>
<tr>
<th>No ... ... ... ...</th>
<th>Product ... ... ... ...</th>
<th>Date of setting Standard ... ... ... ...</th>
</tr>
</thead>
</table>

### Standard Cost Card

<table>
<thead>
<tr>
<th>Element of Cost</th>
<th>Quantity of Hours</th>
<th>Rate Rs.</th>
<th>Standard Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Direct Material</td>
<td>400 units</td>
<td>5.00</td>
<td>2,000</td>
</tr>
<tr>
<td>Material A</td>
<td>100 units</td>
<td>4.00</td>
<td>400</td>
</tr>
<tr>
<td>Material B</td>
<td>500 units</td>
<td></td>
<td>2,400</td>
</tr>
<tr>
<td>Less: Normal Loss 5%</td>
<td>25 units</td>
<td>Scrap Value</td>
<td>400</td>
</tr>
<tr>
<td>Normal Output</td>
<td>475 units</td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td>2. Direct Labour</td>
<td>100 hrs</td>
<td>20</td>
<td>200</td>
</tr>
<tr>
<td>3. Overheads</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cost Accounting - Variance Analysis**

When the actual cost differs from the standard cost, it is called variance. If the actual cost is less than the standard cost or the actual profit is higher than the standard profit, it is called **favorable variance**. On the contrary, if the actual cost is higher than the standard cost or profit is low, then it is called **adverse variance**.

Each element of cost and sales requires variance analysis. Variance is classified as follows:
- Direct Material Variance
- Direct Labor Variance
- Overhead Variance
- Sales Variance

**Direct Material Variance**

Material variances can be of the following categories:

- Material Cost Variance
- Material Price Variance
- Material Usage Variance
- Material Mix Variance
- Material Yield Variance

<table>
<thead>
<tr>
<th>Material Cost Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard cost of materials for actual output – Actual cost of material used</td>
</tr>
<tr>
<td>Or</td>
</tr>
<tr>
<td>Material price variance + Material usage or quantity variance</td>
</tr>
<tr>
<td>Or</td>
</tr>
<tr>
<td>Material price variance + Material mix variance + Material yield variance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material Price Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual usage ( Standard Quantity Price – Actual Unit Price)</td>
</tr>
<tr>
<td>Actual Usage = Actual Quantity of material (in units) used</td>
</tr>
<tr>
<td>Standard Unit Price = Standard Price of material per unit</td>
</tr>
<tr>
<td>Actual Unit Price = Actual price of material per unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material Usage or Quantity Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material usage or Quantity variance : Standard price per unit (Standard Quantity – Actual Quantity )</td>
</tr>
</tbody>
</table>
Material Mix Variance

Material mix variance arises due to the difference between the standard mixture of material and the actual mixture of Material mix.

Material Mix variance is calculated as a difference between the standard prices of standard mix and the standard price of actual mix.

If there is no difference between the standard and the actual weight of mix, then:

\[
\text{Standard unit cost (Standard Quantity – Actual Quantity)}
\]

Or

\[
\text{Standard Cost of Standard Mix – Standard cost of Actual Mix}
\]

Sometimes due to shortage of a particular type of material, standard is revised; then:

\[
\text{Standard unit cost (Revised Standard Quantity – Actual Quantity)}
\]

Or

\[
\text{Standard cost of revised Standard Mix – Standard Cost of Actual mix}
\]

If the actual weight of mix differs from the standard weight of mix, then:

\[
\text{Standard cost of revised standard mix} \times \frac{\text{Total weight of actual mix}}{\text{Total weight of revised standard mix}}
\]

Material Yield Variance

When the standard and the actual mix do not differ, then

\[
\text{Yield Variance} = \text{Standard Rate} \times (\text{Actual Yield} – \text{Standard Yield})
\]

\[
\text{Standard Rate} = \frac{\text{Standard cost of standard mix}}{\text{Net standard output (i.e. Gross output – Standard loss)}}
\]

Direct Labor Variance

Direct labor variances are categorized as follows:

- Labor Cost Variance
- Labor Rate of Pay Variance
- Total Labor Efficiency Variance
- Labor Efficiency Variance
- Labor Idle Time Variance
- Labor Mix Variance or Gang Composition Variance
- Labor Yield Variance or Labor Efficiency Sub Variance
- Substitution Variance

<table>
<thead>
<tr>
<th>Labor Cost Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Cost of Labor – Actual Cost of Labor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labor Rate of pay Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Time taken × (Standard Rate – Actual Rate)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Labor Efficiency Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard rate × (Standard time – Actual time)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labor Efficiency Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Rate (Standard time for actual output – Actual time worked)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labor Idle Time Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idle Time Variance = Abnormal Idle Time × Standard Rate</td>
</tr>
</tbody>
</table>

Total Labor Cost Variance = Labor rate of Pay variance + Total labor Efficiency Variance
Total Labor Efficiency Variance = Labor Efficiency Variance + Labor Idle Time Variance

<table>
<thead>
<tr>
<th>Labor Mix Variance or Gang Composition Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>If actual composition of labor is equal to standard:</td>
</tr>
</tbody>
</table>
LMV = Standard Cost of Standard Composition (for Actual time taken) – Standard Cost of Actual Composition (for Actual time worked)

If standard composition of labor revised due to shortage of any specific type of labor but the total actual time is equal to the total standard time:

LMV = Standard Cost of Revised Standard Composition (for Actual Time Taken) – Standard Cost of Actual Composition (for Actual Time Worked)

If actual and standard time of labor differs:

\[
\text{LMV} = \frac{\text{Total time of actual labor composition}}{\text{Total time of standard labor composition}} \times \text{Std. cost of std.composition} - \text{Std. cost of actual composition}
\]

In case the Standard is revised and there is a difference in the total Actual and the Standard time:

\[
\text{LMV} = \frac{\text{Total time of actual labor composition}}{\text{Total time of revised std.labor composition}} \times \text{Std. cost of (revised std.composition – actual composition)}
\]

**Labor Yield Variance**

\[
\text{Std. Labor Cost per unit} \times (\text{Actual Yield In units} - \text{Std. Yield in units expected from Actual time worked on production})
\]

**Substitution Variance**

\[
(\text{Actual hrs} \times \text{Std. Rate of Std. Worker}) - (\text{Actual hrs} \times \text{Std. Rate actual worker})
\]

---

**Cost Accounting - CVP Analysis**

Cost-Volume-Profit (CVP) Analysis is also known as Break–Even Analysis. Every business organization works to maximize its profits. With the help of CVP analysis, the management studies the co-relation of profit and the level of production.

CVP analysis is concerned with the level of activity where total sales equals the total cost and it is called as the break-even point. In other words, we study the sales value, cost and profit at different levels of production. CVP analysis highlights the relationship between the cost, the sales value, and the profit.
Assumptions

Let us go through the assumptions for CVP analysis:

- Variable costs remain variable and fixed costs remain static at every level of production.
- Sales volume does not affect the selling price of the product. We can assume the selling price as constant.
- At all level of sales, the volume, material, and labor costs remain constant.
- Efficiency and productivity remains unchanged at all the levels of sales volume.
- The sales-mix at all level of sales remains constant in a multi-product situation.
- The relevant factor which affects the cost and revenue is volume only.
- The volume of sales is equal to the volume of production.

Marginal Cost Equation

Equations for elements of cost are as follows:

\[
\begin{align*}
\text{Sales} &= \text{Variable costs} + \text{Fixed Expenses} \pm \text{Profit} / \text{Loss} \\
\text{Or} \\
\text{Sales} - \text{Variable Cost} &= \text{Fixed Expenses} \pm \text{Profit} / \text{Loss} \\
\text{Or} \\
\text{Sales} - \text{Variable Cost} &= \text{Contribution}
\end{align*}
\]

It is necessary to understand the following four concepts, their calculations, and applications to know the mathematical relation between cost, volume, and profit:

- Contribution
- Profit Volume Ratio (P/V Ratio or Contribution/Sales (C/S))
- Break-Even Point
- Margin of Safety

**Contribution**

Contribution = Sales – Marginal Cost

We have already discussed contribution in Marginal Costing topic above.

**Profit-Volume Ratio**

Profit / Volume (P/V) ratio is calculated while studying the profitability of operations of a business and to establish a relation between Sales and Contribution. It is one of the most important ratios, calculated as under:
\[ \frac{P}{V} \text{ Ratio} = \frac{\text{Contribution}}{\text{Sales}} \]

\[ = \frac{\text{Fixed Expenses} + \text{Profit}}{\text{Sales}} \]

\[ = \frac{\text{Sales} - \text{Variable Cost}}{\text{Sales}} \]

\[ = \frac{\text{Change in profits of Contributions}}{\text{Change in Sales}} \]

The P/V Ratio shares a direct relation with profits. Higher the P/V ratio, more the profit and vice-a-versa.

**Break-Even Point**

When the total cost of executing business equals to the total sales, it is called break-even point. Contribution equals to the fixed cost at this point. Here is a formula to calculate break-even point:

B.E.P (in units) =

\[ \frac{\text{Total Fixed Expenses}}{\text{Selling Price per Unit} - \text{Marginal Cost per Unit}} \]

\[ = \frac{\text{Total Fixed Expenses}}{\text{Contribution per Unit}} \]

Break-even point based on total sales:

\[ = \frac{\text{Fixed Cost}}{\frac{\text{P/V Ratio}}{\text{Sales}}} \]

Calculation of output or sales value at which a desired profit is earned:

\[ = \frac{\text{Fixed Expenses} + \text{Desired Profit}}{\text{Selling Price per Unit} - \text{Marginal Cost per Unit}} \]

\[ = \frac{\text{Fixed Expenses} + \text{Desired Profit}}{\text{Contribution per Unit}} \]

**COMPOSITE BREAK EVEN POINT**
A company may have different production units, where they may produce the same product. In this case, the combined fixed cost of each production unit and the combined total sales are taken into consideration to find out BEP.

- **Constant Product** - Mix Approach In this approach, the ratio is constant for the products of all production units.

- **Variable Product** - Mix Approach In this approach, the preference of products is based on bigger ratio.

### Margin of Safety

Excess of sale at BEP is known as margin of safety. Therefore,

\[
\text{Margin of safety} = \text{Actual Sales} - \text{Sales at BEP}
\]

Margin of safety may be calculated with the help of the following formula:

\[
\text{Margin of Safety} = \frac{\text{Profit} \times \text{Ratio}}{\text{Profit} \times \text{Contribution per Unit}}
\]

### Break-Even Chart

Break-Even Chart is the most useful graphical representation of marginal costing. It converts accounting data to a useful readable report. Estimated profits, losses, and costs can be determined at different levels of production. Let us take an example.

### Example

Calculate break-even point and draw the break-even chart from the following data:

- Fixed Cost = Rs 2,50,000
- Variable Cost = Rs 15 per unit
- Selling Price = Rs 25 per unit
- Production level in units: 12,000, 15,000, 20,000, 25,000, 30,000, and 40,000.

#### Solution:

\[
\text{B.E.P} = \frac{\text{Fixed Cost} \times \text{Contribution per unit}}{\text{Profit}}
\]

\[
= \frac{\text{Rs 2,50,000} \times (\text{Rs 25} - \text{Rs 15})}{\text{Rs 10}}
\]

\[
= 25,000 \text{ units}
\]
At production level of 25,000 units, the total cost will be Rs 6,25,000.
(Calculated as \((25000 \times 14) + 2,50000\))

<table>
<thead>
<tr>
<th>Production (In Units)</th>
<th>Total Sale (In Rs)</th>
<th>Total Cost (In Rs)</th>
<th>Profit (Sales - Cost) (In Rs)</th>
<th>Margin of safety (Profit/Contribution per unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12000</td>
<td>3,00,000</td>
<td>4,30,000</td>
<td>-1,30,000</td>
<td></td>
</tr>
<tr>
<td>15000</td>
<td>3,75,000</td>
<td>4,75,000</td>
<td>-1,00,000</td>
<td></td>
</tr>
<tr>
<td>20000</td>
<td>5,00,000</td>
<td>5,50,000</td>
<td>-50,000</td>
<td></td>
</tr>
<tr>
<td>25000</td>
<td>6,25,000</td>
<td>6,25,000</td>
<td>(B.E.P)</td>
<td>(B.E.P)</td>
</tr>
<tr>
<td>30000</td>
<td>7,50,000</td>
<td>7,00,000</td>
<td>50,000</td>
<td>5,000</td>
</tr>
<tr>
<td>40000</td>
<td>10,00,000</td>
<td>8,50,000</td>
<td>1,50,000</td>
<td>15,000</td>
</tr>
</tbody>
</table>

The corresponding chart plotted as production against amount appears as follows:
Management Accounting - Introduction

Institute of Chartered Accountants of England and Wales defines management accounting as:

Any form of accounting which enables a business to conduct more efficiently can be regarded as Management Accounting.

American Accounting Association defines management accounting as:

Management Accounting includes the methods and concepts necessary for effective planning, for choosing among alternative business actions, and for control through the evaluation and interpretation of performance.

Characteristics of Management Accounting

Management accounting provides data to the management on the basis of which they take decisions to achieve organizational goals and improve their efficiency. In this section, we will discuss the main characteristics of management accounting.

To Provide Accounting Information

Information is collected and classified by the financial accounting department, and presented in a way that suits managerial needs to review the various policy decisions of an organization.
Cause and Effect Analysis
One step further from financial accounting, management accounting works to know the reasons of profit or loss of an organization. It works to find out the causes for loss and also study the factors which influence the profitability. Therefore, cause and effect is a feature of management accounting.

Special Technique and Concepts
Budgetary control, marginal costing, standard costing are main techniques used in financial accounting for successful financial planning and analysis, and to make financial data more useful.

Decision Making
Studying various alternative decisions, studying impact of financial data on future, supplying useful data to management, helping management to take decisions is a part of management accounting.

Achieving Tasks
Financial data is used to set targets of the company and to achieve them. Corrective measures are used if there is any deviation in actual and targeted task. This all is done through management accounting with the help of budgetary control and standard costing.

No Fixed Norms
No doubt, tools of management accounting are same, but at the same time; uses of these tools depend upon need, size, and structure of any organization. Thus, no fix norms are used in application of management accounting. On the other hand, financial accounting totally depends on certain rules and principals. Therefore, presentation and analysis of accounting data may vary from one organization to another.

Increasing Efficiency
While evaluating the performance of each department of an organization, management accounting can spot the efficient and inefficient sections of an organization. With the help of that, corrective step can be taken to rectify the inefficient part for better performance. Hence, we can say that efficiency of a concern can increase using accounting information.

Informative Instead of Decision Making
Decisions are taken only by top management using information provided by management accountant as classified in a manner which is useful in decision making. Decision making does not come under preview of accountant, it is only the
top management, who can take decision. Thus, decision of an organization depends on caliber and efficiency of the management.

**Forecasting**
Management accountant helps management in future planning and forecasting using historical accounting data.

**Objectives of Management Accounting**
Let us go through the objectives of management accounting:

**Planning and Formulating Policies**
In the process of planning and formulating policies, a management accountant provides necessary and relevant information to achieve the targets of the company. Management accounting uses regression analysis and time series analysis as forecasting techniques.

**Controlling Performance**
In order to assure effective control, various techniques are used by a management accountant such as budgetary control, standard costing, management audit, etc. Management accounting provides a proper managerial control system to the management. Reports are provided to the management regarding the effective and efficient use of resources.

**Interpreting Financial Statement**
Collecting accounting data and analyzing the same is a key role of management accounting. Management accounting provides relevant information in a systematic way that can be used by the management in planning and decision-making. Cash flow, fund flow, ratio analysis, trend analysis, and comparative financial statements are the tools normally used in management accounting to interpret and analyze accounting data.

**Motivating Employees**
Management accounting provides a selection of best alternative methods of doing things. It motivates employees to improve their performance by setting targets and starting incentive schemes.

**Making Decisions**
Success of any organization depends upon accurate decision-making and effective decision-making is based on informational network as provided by management accounting. Applying techniques of differential costing, absorption costing,
marginal costing, and management accounting provides useful data to the management to aid in their decision-making.

**Reporting to Management**

It is the primary role of management accounting to inform and advice the management about the latest position of the company. It covers information about the performance of various departments on regular basis to the management which is helpful in taking timely decisions.

A management accountant also works in the capacity of an advisory to overcome any existing financial or other problems of an organization.

**Coordinating among Departments**

Management accounting is helpful in coordinating the departments of an organization by applying thorough functional budgeting and providing reports for the same to the management on a regular basis.

**Administrating Tax**

Any organization must comply with the tax systems prevailing in the country they are operating from. It is a challenge due to the ever-increasing complexity of the tax structure. Organization need to file various kinds of returns with different tax authorities. They need to calculate the correct amount of tax and assure timely deposit of tax. Therefore, the management takes guidance from management accountants to comply with the law of the land.

**Management Vs. Cost Accounting**

Management accounting collects data from cost accounting and financial accounting. Thereafter, it analyzes and interprets the data to prepare reports and provide necessary information to the management.

On the other hand, cost books are prepared in cost accounting system from data as received from financial accounting at the end of each accounting period.

The difference between management and cost accounting are as follows:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Cost Accounting</th>
<th>Management Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The main objective of cost accounting is to assist the management in cost control and decision-making.</td>
<td>The primary objective of management accounting is to provide necessary information to the management in the process of its planning, controlling, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Cost accounting system uses quantitative cost data that can be measured in monetary terms.</td>
<td>Management accounting uses both quantitative and qualitative data. It also uses those data that cannot be measured in terms of money.</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Determination of cost and cost control are the primary roles of cost accounting.</td>
<td>Efficient and effective performance of a concern is the primary role of management accounting.</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Success of cost accounting does not depend upon management accounting system.</td>
<td>Success of management accounting depends on sound financial accounting system and cost accounting systems of a concern.</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>Cost-related data as obtained from financial accounting is the base of cost accounting.</td>
<td>Management accounting is based on the data as received from financial accounting and cost accounting.</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>Provides future cost-related decisions based on the historical cost information.</td>
<td>Provides historical and predictive information for future decision-making.</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>Cost accounting reports are useful to the management as well as the shareholders and creditors of a concern.</td>
<td>Management accounting prepares reports exclusively meant for the management.</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>Only cost accounting principles are used in it.</td>
<td>Principals of cost accounting and financial accounting are used in management accounting.</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>Statutory audit of cost accounting reports are necessary in some cases, especially big business houses.</td>
<td>No statutory requirement of audit for reports.</td>
</tr>
</tbody>
</table>
Management Vs. Financial Accounting

All monetary transactions are recorded in the books of accounts on historical cost basis. Financial statements are prepared to ascertain the actual profit or loss of the firm and to know the financial position of the firm of every accounting period.

Management accounting collects data from financial statements, analyzes, and then provides this data to the management.

<table>
<thead>
<tr>
<th>S.no.</th>
<th>Financial Accounting</th>
<th>Management Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Monetary transactions are the base of financial accounting.</td>
<td>Data as obtained from financial accounting is the base of management accounting.</td>
</tr>
<tr>
<td>2</td>
<td>Recognition, classification, recording of financial transactions on actual basis, and preparation of financial statement are the main functions of financial accounting.</td>
<td>Collection of data from financial accounting, provision of necessary information to the management for planning, decision-making, and evaluation are the main functions of management accounting.</td>
</tr>
<tr>
<td>3</td>
<td>Support of relevant figures is required in preparing the financial reports.</td>
<td>Subjective and objective, both figures may be present in the management accounting report.</td>
</tr>
<tr>
<td>4</td>
<td>Success of financial accounting does not depend on sound management accounting system.</td>
<td>Success of management accounting depends on sound financial accounting system of a concern.</td>
</tr>
<tr>
<td>5</td>
<td>Financial reports are used by the management of a company, shareholders, creditors, and financial institutions.</td>
<td>Financial reports are exclusively used by the management only.</td>
</tr>
</tbody>
</table>
Management Accounting - Cash Flow

It is very important for a business to keep adequate cash in hand to meet day-to-day expenditures and to invest as and when required in business. Thus, cash plays a very vital role to run a business successfully. Sometimes it has been observed that in spite of adequate profit in business, they are unable to meet their taxes and dividends, just because of shortage of cash flow.

We have read about two very important financial statements: first, revenue statement and second, balance sheet. Revenue statements provide essential information about the operating activities of a concern, and balance sheets show the financial position of a firm. But, both are unable to convey anything about the generation of cash out of all business activities.

Keeping in view the above limitation, the financial accounting board, U.S.A., has emphasized on the need for a cash flow statement as:

“Financial reporting should provide information to help potential investors and creditors and other users in assessing the amounts, timing and uncertainty of prospective cash receipts from dividends or interest and proceeds from the sales, redemption or maturity of securities or loans. The prospects for those cash receipts of effected by an enterprises ability to generate enough cash to meet the obligation when due and its others operating needs to re-invest in operations and to pay cash dividends.”

In June 1995, the Securities and Exchange Board of India “SEBI” amended Clause 32 of the listing agreement requiring every listed companies to give along with the balance sheet and profit & loss account, a cash flow statement prepared in the prescribed format, showing cash flows from operating activities, investing activities and financing activities, separately.
Recognizing the importance of cash flow statement, The Institute of Chartered Accountants of India (ICAI) issued AS-3 revised Cash flow statements in March 1997. The revised accounting standards supersede AS-3 changes in financial position, issued in June 1981. The objectives of cash flow statement given in AS-3 (Revised) are as under:

“Information about the cash flows of an enterprise is useful in providing users of financial statements with a basis to assess the ability of the enterprises to generate cash and cash equivalents and the needs of the enterprises to utilize those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an enterprise to generate cash and cash equivalents and the timing and certainty of their generations. The statement deals with the provision of information about the historical changes in cash and cash equivalents of an enterprise by mean of cash flow the statement which classified cash flow during the period from operating, investing and financing activities.”

During a specified period of time, a cash flow statement describes the inflows and outflows of the cash and cash equivalents in an enterprise. A cash flow statement shows the net effect of various business transactions on cash and cash equivalents and consideration of receipts and payments of cash. Cash flow is a summary of change in cash position in between the dates of two balance sheets and revenue statements. The important terms used in a cash flow statement are as follows:

**Cash**

The meaning of cash is cash in hand and cash at bank including deposits.

**Cash and Cash Equivalents**

Here, cash and cash equivalents imply readily convertible, highly liquid investments, the value of which in cash is well-known to us without risk of change in its realization amount. The purpose of keeping cash equivalents is to meet our current and short-term commitment rather than for investments. Only those investments having short maturity terms qualify as cash equivalents. Short maturity means maturity within three months.

**Cash Flows**

There are two types of flows: inflows and outflows. If the increase in cash is the effect of transactions, it is called inflows of cash; and if the result of transactions is decrease in cash, it is called outflows of cash.

**Note:** If decrease in cash is due to cash management rather than its operating, investing, and financing activities, it will be excluded from cash outflows. Cash management means investment of cash in cash equivalents.

**Classification of Cash Flows**
According to AS-3 (Revised), cash flows should be classified in three main categories:

- Cash Flow from operating activities
- Cash Flow from investing activities
- Cash Flow from financing activities

**Cash flow from operating activities**

Inflow of cash from operating activities represents the level of sufficient cash generation necessary to maintain operating capability without recourse to external resource of financing.

In other words, operating activities mean principal revenue-producing activities of a firm. It represents the transactions those determine the profit or loss of a firm.

Examples of cash Flows from operating activities:

- Cash sale (goods or services)
- Cash receipts from commission, fees and royalties income etc.
- Cash payments to workers or employees in form of salary or wages.
- Cash payments to supplier of goods or services.
- Cash receipt on account of insurance premium by insurance companies.
- Cash payments in form of claims, annuity and other benefits.
- Cash payments or refund of income tax in case not included in investing or financing activities.
- Cash payments on account of current and future contracts.

**Note:** Cash receipt on sale of plant and machinery comes under category of investing activities.

**Cash flow from investing activities**

Assets and long-term investments that do not come under cash equivalents are known as investing activities. Investing activity represents how much investment in long-term assets has been made to earn profit in future.

Examples of Cash Flows from investing activities:

- Cash payments to acquire tangibles and intangibles assets including construction of assets and capitalization of research and development cost.
- Cash receipts from sale of investments and disposal of fixed assets.
• Cash payment for investments in shares, warrants and debentures of other companies etc. excluding those which are covered under cash equivalents or purchased for trading purpose. If so, those come under operating activities.

• Cash received from disposal of or sale of shares, warrants or redemption of funds other than those which are kept for trading purpose.

• Advances or loan made to third party other than by financing companies.

• Cash payment for future contracts other than trading purpose.

• Cash received from future contracts other than trading purpose.

Cash flow from financing activities

The activities which may result in change in size and composition of owner’s capital including preference shares are called financing activities. Separate disclosure is important for financing activities.

Examples of Cash flows from financing activities include cash received on issue of shares, debentures, loans, bonds and other short- or long-term borrowings.

Cash payments on redemption of debentures bonds, preference shares etc.

Treatment of Some Typical Items

The treatment of some typical cash flow items is discussed below.

Extraordinary Items

Inflow or outflow of cash is classified according to the nature of activities that may be operating, investing, or financing activities. Cash flow due to extraordinary items should be shown separately in the cash flow statement to enable users to understand its nature and effect on the cash flow statement.

Interest and Dividends

If cash flow arises due to interest paid or interest and dividend received, then that should be classified as operating activities in case of "financial enterprises". In case of "other than financial organizations", the interest paid should be classified as financing activity, and the interest and dividends received should be classified as investing activity.

Note: Dividend paid should be classified as financing activity in both the above cases.
Taxes on Income

Taxes on income should be separately disclosed and should be classified under operating activities in most of the cases except where we can easily identify the taxes according to nature of income but if total amount of tax is given, then it should be classified as operating activities.

Note: Dividend distribution tax will be classified as financing activities.

Cash flows from acquisition and disposal of subsidiaries and other business units:
Cash flow arises due to acquisition or disposal of subsidiary should be shown separately and classified as investing activities. This transaction should be easily identifiable in cash flow statement to enable users to understand the effect of it. The cash flow of disposal is not deducted from cash flow of acquisition.

Foreign Currency

Items appearing in a cash flow statement should be shown in local currency value, applying actual foreign currency rate of the particular day on which cash flow statement is going to be prepared. Effect on value of cash and cash equivalents as reflected in the cash flow statement due to change in rate of foreign currency should be shown separately as a reconciliation of changes.

Due to change in foreign currency rate, unrealized gains and losses are not cash flows. However, effect on cash and cash equivalents held or due in foreign currency are reported in cash flow statement in order to reconcile the cash and cash equivalents at the beginning and at the end of the period.

Non-Cash Transactions

Some investing and financing activities do not have any direct impact on cash flows. For example, conversion of debt to equity, acquisition of an enterprise by means of issuance of share, etc.

Those transactions should be excluded from cash flow statements, in which there are no use of cash or cash equivalents. There are other financial statements in which those investing and financing activities appear separately.

Format: (Direct Method)

<table>
<thead>
<tr>
<th>M/s ABC LIMITED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flow Statement for the year ended 31 March 2014</td>
</tr>
</tbody>
</table>

| Particulars | Amount |
Cash Flows from Operating Activities (Schedule-1) XX
Cash Flows from Investing Activities (Schedule-2) XX
Cash Flows from Financing Activities (Schedule-3) XX
Extraordinary Items XX
Net Profit before Tax XX
Income Tax Paid XX
Net Increase or Decrease in cash or cash Equivalents XX
Add: Cash & Cash Equivalents at the beginning of the period XX
Cash and Cash Equivalents at the end of the period XXX

**Schedule - 1**
Cash flow from operating activities

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash received from customers</td>
<td>XXX</td>
</tr>
<tr>
<td>Cash paid for:</td>
<td></td>
</tr>
<tr>
<td>- Suppliers for Purchases</td>
<td>XX</td>
</tr>
<tr>
<td>- Wages &amp; Salary</td>
<td>XX</td>
</tr>
<tr>
<td>- Operating and General administrative expenses</td>
<td>XX</td>
</tr>
<tr>
<td>Net Profit before Taxes →</td>
<td>XX</td>
</tr>
</tbody>
</table>

THANKS FOR READING – VISIT OUR WEBSITE: www.educatererindia.com
Income Tax Paid → XX
Cash flow from Operating Activities → XXX

**Schedule-2**
Cash flow from investing activities

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash received for:</td>
<td></td>
</tr>
<tr>
<td>- Sale of Fixed Assets</td>
<td>XX</td>
</tr>
<tr>
<td>- Sale of Investment</td>
<td>XX</td>
</tr>
<tr>
<td>- Interest received</td>
<td>XX</td>
</tr>
<tr>
<td>- Dividend received</td>
<td>XX XXX</td>
</tr>
<tr>
<td>Cash paid for:</td>
<td></td>
</tr>
<tr>
<td>- Purchase of Fixed Assets</td>
<td>XX</td>
</tr>
<tr>
<td>- Purchase of Investments</td>
<td>XX XX</td>
</tr>
<tr>
<td>Net Cash Flow from Investing Activities →</td>
<td>XX</td>
</tr>
</tbody>
</table>

**Schedule-3**
Cash flow from financing activity

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
</table>

Cash received for:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue of Equity Shares</td>
<td>XX</td>
</tr>
<tr>
<td>Issue of Preference Share</td>
<td>XX</td>
</tr>
<tr>
<td>Long term borrowings</td>
<td>XX</td>
</tr>
<tr>
<td></td>
<td>XXX</td>
</tr>
</tbody>
</table>

Cash paid for:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest paid</td>
<td>XX</td>
</tr>
<tr>
<td>Redemption of preference shares</td>
<td>XX</td>
</tr>
<tr>
<td>Repayment of Loans</td>
<td>XX</td>
</tr>
<tr>
<td>Dividend paid</td>
<td>XX</td>
</tr>
<tr>
<td>Purchase of Investments</td>
<td>XX</td>
</tr>
<tr>
<td>Purchase of Investments</td>
<td>XX</td>
</tr>
</tbody>
</table>

Net Cash Flow from Financing Activities → XX

**Cash Flow Indirect Method**

- Two Balance Sheet requires.
- No need of Profit & Loss account in Indirect Method.
- Non Cash Item require.
- We need change in current Assets & Current Liabilities account.
- No need to open, Opening current assets and current Liabilities accounts.
Format
(Indirect Method): Given by AS-3

M/s XYZ LIMITED
Cash flow Statement for the year ended 31 March 2014

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flows from Operating Activities (Schedule- 1)</td>
<td>XX</td>
</tr>
<tr>
<td>Cash Flows from Investing Activities (Schedule- 2)</td>
<td>XX</td>
</tr>
<tr>
<td>Cash Flows from Financing Activities (Schedule-3)</td>
<td>XX</td>
</tr>
<tr>
<td>Extraordinary Items</td>
<td>XX</td>
</tr>
<tr>
<td>Net Profit before Tax</td>
<td>XX</td>
</tr>
<tr>
<td>Income Tax Paid</td>
<td>XX</td>
</tr>
<tr>
<td><strong>Net Increase or Decrease in cash or cash Equivalents</strong></td>
<td>XX</td>
</tr>
<tr>
<td>Add: Cash &amp; Cash Equivalents at the beginning of the period</td>
<td>XX</td>
</tr>
<tr>
<td><strong>Cash and Cash Equivalents at the end of the period</strong></td>
<td>XXX</td>
</tr>
</tbody>
</table>

Schedule-1
Cash flow from operating activities

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in Profit &amp; Loss account</td>
<td>XX</td>
</tr>
<tr>
<td>Changes in Reserve (Any)</td>
<td>XX</td>
</tr>
<tr>
<td>(+) Interim Dividend</td>
<td>XX</td>
</tr>
</tbody>
</table>
Net Profit → XXX

Non Cash Items:

(+) Depreciation XX

(+) Loss on Sale of Fixed Assets XX

(+) Goodwill Amortization XX

(+) Preliminary Expenses written off XX

Non Cash Incomes:

(-) Gain on Sale of Fixed Assets XX

Operating Profit before working Capital changes → XXX

± Changes in Current Assets & Current liabilities XX

Cash operating Expenses before Tax

---

Tax Paid XXX

X

Cash Flow from Operating Activities → XXX
Schedule-2
Cash flow from investing activities

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash received for:</td>
<td></td>
</tr>
<tr>
<td>- Sale of Fixed Assets</td>
<td>XX</td>
</tr>
<tr>
<td>- Sale of Investment</td>
<td>XX</td>
</tr>
<tr>
<td>- Interest received</td>
<td>XX</td>
</tr>
<tr>
<td>- Dividend received</td>
<td>XX     XXX</td>
</tr>
<tr>
<td>Cash paid for:</td>
<td></td>
</tr>
<tr>
<td>- Purchase of Fixed Assets</td>
<td>XX</td>
</tr>
<tr>
<td>- Purchase of Investments</td>
<td>XX     XX</td>
</tr>
</tbody>
</table>

Net Cash Flow from Investing Activities → XX

Schedule-3
Cash flow from financing activity

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Management Accounting - Ratio Analysis

Ratio is an expression of relationship between two or more items in mathematical terms. Exhibition of meaningful and useful relation between different accounting data is called Accounting Ratio. Ratio may be expressed as a:b (a is to b), in terms of simple fraction, integer, or percentage.

If the current assets of a concern is Rs 4,00,000 and the current liabilities is Rs 2,00,000, then the ratio of current assets to current liabilities is given as 4,00,000 / 2,00,000 = 2. This is called simple ratio. Multiply a ratio by 100 to express it in terms of percentage.

We can express the ratio between 200 and 100 in any of the following ways:

<table>
<thead>
<tr>
<th>Cash received for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Issue of Equity Shares XX</td>
</tr>
<tr>
<td>- Issue of Preference Share XX</td>
</tr>
<tr>
<td>- Long-term borrowings XX XXX</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash paid for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Interest paid XX</td>
</tr>
<tr>
<td>- Redemption of Preference shares XX</td>
</tr>
<tr>
<td>- Repayment of Loans XX</td>
</tr>
<tr>
<td>- Dividend paid XX</td>
</tr>
<tr>
<td>- Purchase of Investments XX XX</td>
</tr>
</tbody>
</table>

Net Cash Flow from Financing Activities → XX
Ratios are extremely useful in drawing the financial position of a concern.

**Accounting Analysis**

Comparative analysis and interpretation of accounting data is called Accounting Analysis. When accounting data is expressed in relation to some other data, it conveys some significant information to the users of data.

**Ratio Analysis and its Applications**

Ratio analysis is a medium to understand the financial weakness and soundness of an organization. Keeping in mind the objective of analysis, the analyst has to select appropriate data to calculate appropriate ratios. Interpretation depends upon the caliber of the analyst.

Ratio analysis is useful in many ways to different concerned parties according to their respective requirements. Ratio analysis can be used in the following ways:

- To know the financial strength and weakness of an organization.
- To measure operative efficiency of a concern.
- For the management to review past year’s activity.
- To assess level of efficiency.
- To predict the future plans of a business.
- To optimize capital structure.
- In inter and intra company comparisons.
- To measure liquidity, solvency, profitability and managerial efficiency of a concern.
- In proper utilization of assets of a company.
- In budget preparation.
- In assessing solvency of a firm, bankruptcy position of a firm, and chances of corporate sickness.

**Advantages of Ratio Analysis**

- It is powerful tool to measure short and long-term solvency of a company.
• It is a tool to measure profitability and managerial efficiency of a company.
• It is an important tool to measure operating activities of a business.
• It helps in analyzing the capital structure of a company.
• Large quantitative data may be summarized using ratio analysis.
• It relates past accounting performances with the current.
• It is useful in coordinating the different functional machineries of a company.
• It helps the management in future decision-making.
• It helps in maintaining a reasonable balance between sales and purchase and estimating working capital requirements.

Limitations of Ratio Analysis

Although Ratio Analysis is a very useful accounting tools to analyze and interpret different accounting equations, it comes with its own set of limitations:

• If the data received from financial accounting is incorrect, then the information derived from ratio analysis could not be reliable.
• Unauthenticated data may lead to misinterpretation of ratio analysis.
• Future prediction may not be always dependable, as ratio analysis is based on the past performance.
• To get a conclusive idea about the business, a series of ratios is to be calculated. A single ratio cannot serve the purpose.
• It is not necessary that a ratio can give the real present situation of a business, as the result is based on historical data.
• Trend analysis is done with the help of various calculated ratios that can be distorted due to the changes in the price level.
• Ratio analysis is effective only where same accounting principles and policies are adopted by other concerns too, otherwise inter-company comparison will not exhibit a real picture at all.
• Through ratio analysis, special events cannot be identified. For example, maturity of debentures cannot be identified with ratio analysis.
• For effective ratio analysis, practical experience and knowledge about particular industry is essential. Otherwise, it may prove worthless.
• Ratio analysis is a useful tool only in the hands of an expert.
Types of Ratio
Ratios can be classified on the basis of financial statements or on the basis of functional aspects.

Classification on the Basis of Financial Statement

**Balance Sheet Ratios**
Ratios calculated from taking various data from the balance sheet are called balance sheet ratio. For example, current ratio, liquid ratio, capital gearing ratio, debt equity ratio, and proprietary ratio, etc.

**Revenue Statement Ratio**
Ratios calculated on the basis of data appearing in the trading account or the profit and loss account are called revenue statement ratios. For example, operating ratio, net profit ratio, gross profit ratio, stock turnover ratio.

**Mixed or Composite Ratio**
When the data from both balance sheet and revenue statements are used, it is called mixed or composite ratio. For example, working capital turnover ratio, inventory turnover ratio, accounts payable turnover ratio, fixed assets turnover ratio, return of net worth ratio, return on investment ratio.

<table>
<thead>
<tr>
<th>Classification of Ratios on the Basis of Financial Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance Sheet Ratios</strong></td>
</tr>
<tr>
<td>- Current Ratio</td>
</tr>
<tr>
<td>- Liquid Ratio</td>
</tr>
<tr>
<td>- Absolute Liquid Ratio</td>
</tr>
<tr>
<td>- Debt Equity Ratio</td>
</tr>
<tr>
<td>- Proprietorship Ratio</td>
</tr>
<tr>
<td>- Capita Gearing Ratio</td>
</tr>
<tr>
<td>- Assets Proprietorship Ratio</td>
</tr>
<tr>
<td>Capital Inventory to Working Capital Ratio</td>
</tr>
<tr>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Ratio of Current Assets to Fixed Assets</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Classification on the Basis of Financial Aspects

Ratios can be further classified based on their functional aspects as discussed below.

**Liquidity Ratios**

Liquidity ratios are used to find out the short-term paying capacity of a firm, to comment short term solvency of the firm, or to meet its current liabilities. Similarly, turnover ratios are calculated to know the efficiency of liquid resources of the firm, Accounts Receivable (Debtors) Turnover Ratio and Accounts Payable (Creditors).

**Long-Term Solvency and Leverage Ratios**

Debt equity ratio and interest coverage ratio are calculated to know the efficiency of a firm to pay long-term debts and to meet interest costs. Leverage ratios are calculated to know the proportion of debt and equity in the financing of a firm.

**Activity Ratios**

Activity ratios are also called turnover ratios. Activity ratios measure the efficiency with which the resources of a firm are employed.

**Profitability Ratios**

The results of business operations can be calculated through profitability ratios. These ratios can also be used to know the overall performance and effectiveness of a firm. Two types of profitability ratios are calculated in relation to sales and investments.

**FUNCTIONAL CLASSIFICATION OF RATIOS**
### Liquidity Ratios

- Current Ratio
- Liquid Ratio
- Absolute Liquid or Cash Ratios
- Interval Measure

### Long-Term Solvency and Leverage Ratios

- Debt/Equity Ratio
- Debt to total Capital Ratio
- Interest Coverage Ratio
- Cash Flow/Debt
- Capital Gearing

### Activity Ratios Asset Management Ratios

- Inventory Turnover Ratio
- Debtor Turnover Ratio
- Fixed Assets Turnover Ratio
- Total Assets Turnover Ratio
- Working Capital Turnover Ratio
- Payable Turnover Ratio
- Capital Employed Turnover Ratio

### Profit Abilities Ratios

#### (A) In relation to sales

- Gross Profit Ratio
- Operating Ratio
- Operating Ratio
- Operative Profit Ratio
- Net Profit Ratio
- Expenses Ratio

#### (B) In relation to Investments

- Return on Investment
- Return on Capital
- Return on Equity
- Return on Total
- Resources
- Earnings per Share
- Price Earnings Ratio
## Management Accounting - Useful Ratios

### Short-term Financial Position or Test of Liquidity

<table>
<thead>
<tr>
<th>Ratios</th>
<th>Formula</th>
</tr>
</thead>
</table>
| (a) Current Ratios                  | \[
|                                     | \frac{\text{Current Assets}}{\text{Current Liabilities}} \]
| (b) Quick or Acid Test or Liquid Ratio | \[
|                                     | \frac{\text{Liquid Assets}}{\text{Current Liabilities}} \]
| (c) Absolute Liquid Ratio           | \[
|                                     | \frac{\text{Absolute Liquid Assets}}{\text{Current Liabilities}} \]
| (d) Interval Measure                | \[
|                                     | \frac{\text{Liquid Assets}}{\text{Avg.Daily Operating Expenses}} \]

### Current Assets Movement (Asset Management Ratios)

<table>
<thead>
<tr>
<th>Ratios</th>
<th>Formula</th>
</tr>
</thead>
</table>
| (a) Inventory /Stock Turnover Ratio | \[
|                                     | \frac{\text{Cost of Goods Sold}}{\text{Avg.Inventory at Cost}} \]
| (b) Debtors or receivables Turnover Ratio /Velocity | \[
|                                     | \frac{\text{Net Credit Annual Sales}}{\text{Avg.Trade Debtors}} \]
| (c) Average Collection Period       | \[
|                                     | \frac{\text{Total Trade Debtors}}{\text{Sale per Day}} \]
| (d) Creditors / Payable Turnover Ratio / Velocity | \[
|                                     |                                            \]
### Analysis of Long-term Financial Position or Test of Solvency

<table>
<thead>
<tr>
<th>Formula</th>
<th>Description</th>
</tr>
</thead>
</table>
| (a) Debt Equity Ratio | \[
\frac{\text{Outsiders Funds}}{\text{Shareholders' Funds}} = 1
\]
| (b) Funded Debt to Total Capitalization Ratio | \[
\frac{\text{Funded Debts}}{\text{Total Capitalization}} \times 100 = 1
\]
| (c) Ratio of Long term Debt to Shareholders, Funds (Debt Equity) | \[
\frac{\text{Long term Debts}}{\text{Shareholders' Funds}} = 1
\]
| (d) Proprietary or Equity Ratio | \[
\frac{\text{Shareholders Funds}}{\text{Total Assets}} = 1
\]
| (e) Solvency Ratio | \[
\frac{\text{Total Liabilities to Outsiders}}{\text{Total Assets}} = 1
\]
| (f) Fixed Assets Net Worth Ratio | \[
\text{Net Credit Annual Purchase} = \frac{\text{Avg. Trade Creditors}}{\text{Avg. Daily Purchase}}
\]
| (g) Working Capital Turnover Ratio | \[
\frac{\text{Sales or Cost of Sales}}{\text{Net Working Capital}}
\]
(g) Fixed Assets Ratio or Fixed Assets to Long Term Funds

\[
\text{Fixed Assets after Depreciation} : \text{Shareholders' Funds} = \text{Fixed Assets after Depreciation} : \text{Total long term Fund}
\]

(h) Ratio of Current Assets to Proprietary funds

\[
\text{Current Assets} : \text{Shareholders' Funds} = \text{Current Assets} : \text{Total long term Fund}
\]

(i) Debt-Service or Interest Coverage

\[
\text{Net Profit (before Int. & Taxes)} : \text{Fixed Interest Charges} = \text{Net Profit (before Int. & Taxes)} : \text{Total Fixed Charges}
\]

(j) Total Coverage or Fixed Charge Coverage

\[
\text{EBIT} : \text{Total Fixed Charges}
\]

(k) Preference Dividend Coverage Ratio

\[
\text{Net Profit (before Int. & Taxes)} : \text{Preference Dividend}
\]

(l) Cash to debt-Service Ratio or Debt Cash Flow Coverage

\[
\frac{\text{CF}}{1 + \frac{\text{SFD}}{\text{Tax Rate}}} = \frac{\text{Annual cash flow before Int. & Tax}}{\text{Sinking fund appropriation on debt}}
\]

Analysis of Profitability

(i) General Profitability:

(a) Gross Profit Ratio

\[
= \frac{\text{Gross Profit}}{\text{Net Sale}} \times 100
\]

(b) Operating Ratio

\[
=
\]
### Overall Profitability

<table>
<thead>
<tr>
<th>Formula</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Return on Shareholders’ Investment (RoI)</td>
</tr>
<tr>
<td>(b)</td>
<td>Return on Equity Capital</td>
</tr>
<tr>
<td>(c)</td>
<td>Earnings per Share (EPS)</td>
</tr>
<tr>
<td>(d)</td>
<td>Return on Gross Capital Employed</td>
</tr>
</tbody>
</table>
### Financial Ratios

<table>
<thead>
<tr>
<th>Ratio Type</th>
<th>Formula</th>
</tr>
</thead>
</table>
| (e) Return on Net Capital Employed | \[
\frac{\text{Adjusted Net Profit}}{\text{Net Capital Employed}} \times 100
\] |
| (f) Return on Assets | \[
\frac{\text{Net Profit after Tax}}{\text{Avg.Total Assets}} \times 100
\] |
| (g) Capital Turnover Ratio | \[
\frac{\text{Sale or Cost of Sale}}{\text{Capital Employed}} \times 100
\] |
| (h) Fixed Assets Turnover Ratio | \[
\frac{\text{Sale or Cost of Goods Sold}}{\text{Fixed Assets}} \times 100
\] |
| (i) Working Capital Turnover Ratio | \[
\frac{\text{Sale or Cost of Goods Sold}}{\text{Net Working Capital}} \times 100
\] |

### Market Test or Valuation Ratio

<table>
<thead>
<tr>
<th>Ratio Type</th>
<th>Formula</th>
</tr>
</thead>
</table>
| (a) Dividend Yield Ratio | \[
\frac{\text{Dividend per Share}}{\text{Market Value per Share}}
\] |
| (b) Dividend Payout Ratio | \[
\frac{\text{Dividend per Equity Share}}{\text{Earnings per Share}}
\] |
| (c) Price/Earnings (P/E) Ratio | \[
\frac{\text{Market Price per Equity Share}}{\text{Earnings per Share}}
\] |
| (d) Earning Yield Ratio | \[
\text{Earnings per Share}
\] |
(e) Market Value Book Value Ratio

\[
\text{Earnings per Share} \times \frac{\text{Market price per share}}{\text{Book value per share}}
\]

(f) Market Price to Cash Flow Ratio

\[
\text{Market price per share} \times \frac{\text{Cash flow per share}}{\text{Book value per share}}
\]

### Market Test or Valuation Ratio

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Capital Gearing Ratio</td>
<td>(\frac{\text{Equity Share Capital } + \text{ Reserve &amp; Surplus} + \text{ Pref.Capital} + \text{ Long term Debt bearing Fixed Interest}}{\text{Pref.Capital}})</td>
</tr>
<tr>
<td>(b) Total Investment to Long Term Liabilities</td>
<td>(\frac{\text{Shareholders Fund} + \text{ Long term Liabilities}}{\text{Long term Liabilities}})</td>
</tr>
<tr>
<td>(c) Debt Equity Ratio</td>
<td>(\frac{\text{Outsiders Funds}}{\text{Shareholders Funds}})</td>
</tr>
<tr>
<td>(d) Ratio to Fixed Assets to Funded Debt</td>
<td>(\frac{\text{Fixed Assets}}{\text{Funded Debts}})</td>
</tr>
<tr>
<td>(e) Ratio of Current Liabilities to Proprietors fund</td>
<td>(\frac{\text{Current Liabilities}}{\text{Shareholders′ Funds}})</td>
</tr>
<tr>
<td>(f) Ratio of Reserve to Equity Capital</td>
<td>(\frac{\text{Reserves}}{\text{Equity Share Capital}} \times 100)</td>
</tr>
<tr>
<td>(g) Financial Leverage</td>
<td>(\frac{\text{EBIT}}{\text{EBIT − Interest &amp; Pref.Dividend}})</td>
</tr>
</tbody>
</table>
Operating Leverage

\[ \text{Operating Leverage} = \frac{\text{Contribution}}{\text{EBIT}} \]

Management Accounting - Working Capital

Working capital is defined by experts as follows:

“Working capital is the amount of funds necessary to cover the cost of operating the enterprises.”

---Shubin

“Circulating capital means current assets of a company that are changed in the ordinary course of business from one form to another, as for example, from cash to inventories, inventories to receivables, receivables in to cash.”

---Genestenberg

Broadly, there are two types of capital required for a business:

- Fixed Capital
- Working Capital

Fixed capital requires investing in long term investments of business to create production facility through purchase of fixed assets such as building, plant, machinery, furniture etc. Investment in these assets means permanent blockage of capital or for a long term fixed term blockage of funds.

Capital is required for short term purposes to purchase raw material, payment of day to day needs of organization, routine business expenditure, payment of salaries, wages, taxes etc. These funds are called working capital. Working capital refers to capital to finance short term or current assets such as cash, securities, debtors and inventories.

Gross Working Capital and Net Working Capital

Gross working capital means the investment in current assets, whereas the Net working capital means the difference of current assets and current liabilities. Net working capital can be positive or negative.

<table>
<thead>
<tr>
<th>NET WORKING CAPITAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A) Current Assets</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
</tr>
<tr>
<td>Cash in hand</td>
</tr>
<tr>
<td>Cash at Bank</td>
</tr>
<tr>
<td>Sundry Debtors</td>
</tr>
<tr>
<td>Bills receivables</td>
</tr>
<tr>
<td>Inventories of Stock</td>
</tr>
<tr>
<td>Raw Material</td>
</tr>
<tr>
<td>Work-in-Process</td>
</tr>
<tr>
<td>Finished Goods</td>
</tr>
<tr>
<td>Invetories of Stock</td>
</tr>
<tr>
<td>Short Term Investments</td>
</tr>
<tr>
<td>Prepaid Expenses</td>
</tr>
<tr>
<td>Accrued Incomes</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
</tr>
</tbody>
</table>

(B) Less: Current Liabilities

<table>
<thead>
<tr>
<th></th>
<th>XXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sundry Creditors</td>
<td></td>
</tr>
<tr>
<td>Short term Loans, advances and deposits</td>
<td></td>
</tr>
<tr>
<td>Bank Overdraft</td>
<td></td>
</tr>
<tr>
<td>Bills payable</td>
<td></td>
</tr>
<tr>
<td>Provisions</td>
<td></td>
</tr>
</tbody>
</table>
Working Capital Cycle

Generation and disbursement of cash is carried out in the manner depicted by the following diagram:
Cash

Debtors

Working Capital

Creditors

Inventory

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