**UNIT - IV**

A Business concern has to keep a systematic record of its business transactions. Book-Keeping is the art of recording business transactions in regular and systematic manner. According to Carter “Book-Keeping” is the science and art of correctly recording in books of account all those business transactions that result in the transfer of money or money’s worth. The term ‘Accountancy’ is used for accounting work of a higher order. According Smith and Ashburne “Accounting is the science of recording and classifying business transactions and events, primarily of financial character, and the art of making significant summaries, analysis and interpretations of those transactions and events, and communicating the results to persons who must make decisions or form judgements.”

According to Committee on Terminology of American Institute of certified Public Accountants (A.I.C.P.A) “Accounting is the art of recording, classifying and summarizing in a significant manner and in terms of money, transactions and events which are in part at least, of a financial character and interpreting the results there of.”

According to above definition, Accounting involves the following characteristics:

1). It is an art of recording financial transactions.

2). It involves making summaries and analysis of financial transactions.

3). It is an art of interpreting the results of the financial transactions and

communicating the results to the persons who are interested in such

results.

Accountings are regarded as ‘language of business’. It means that it

Communicates with parties concerned through accounting statements.

# ACCOUNTING PRINCIPLES

If accounting has to serve the purpose of communicating the results of a business to the outside world, it should be based on certain uniform and scientifically laid down principles. Accounting Principles or standards are general rules adopted in accounting. These principles enable standardization in reporting of financial information. They are developed for common usage to ensure uniformity and understandability. Accounting principles may be defined as those rules of conduct or procedure which are adopted by the accountants universally while recording the accounting transactions. Accounting principles are not rigid. They are in the process of evolution, i.e. they are fast developing. Accounting principles can be classified into two categories:

1). Accounting Concepts and 2). Accounting Conventions.

# Accounting Concepts

Accounting concepts mean the assumptions or conditions upon which accounting is based. There are a number of accounting concepts agreed upon and adopted by accountants. Some of the important accounting concepts are:

**1). Business Entity Concept:**

In accounting, business is treated as an entity different from the proprietor. The business and the ;proprietors, i.e. owners, are regarded as two separate entities

(i.e. parties). All the transactions of the business are recorded in the books of the business from the view point of business as an entity. In case this concept is not followed, affairs of the business will be mixed with the personal transactions of the proprietor and the true picture of the business will not be known. Even the proprietor is regarded as creditor to the extent of the capital contributed by him to the business. Capital is regarded as liability of the business to the proprietor.

**2). Dual Aspects Concept:**

According to this concept, every business transaction has a dual aspect. Every business transaction always results in receiving of some benefit of some value and giving of some other benefit of equal value. For instance, when a business purchases goods for cash, it receives goods of some value and gives cash of equal value. Every business transaction involves dual or double aspects of equal value so in accounting, a record is made of the dual or two aspects of each transaction.

**3). Going Concern Concept**:

Accounting is done on the assumption that the business shall have a long life and it will continue to exist until it is dissolved. It is for this reason that fixed assets are recorded at original cost and are depreciated on the basis of their expected life rather than on the basis of market value. It is not proper to show fixed assets in the Balance Sheet at the marked value, as they are not intended to be sold immediately.

**4). Cost Concept**:

According to this concept, an asset is recorded in the books at the price paid to acquire it and this cost is the basis for all subsequent accounting for the asset. Assets are not recorded at market values bcoz these values keep on changing with changes in price level from time to time.

**5). Money Measurement Concept:**

The money measurement concept signifies that in accounting a record is made only of those transactions or events which can be expressed in terms of money. Any happening or fact which can not be expresses in terms of money cannot be recorded in accounting books. Non-monetary events such as retirement of manager, sales policy of management, working conditions of workers, worker satisfaction, etc. cannot be recorded in accounting books. The money measurement concept has one great advantage. It helps a concern to express heterogeneous items such as bank balance, stock-in-trade, Furniture, Machinery, Building etc. in terms of a common denominator viz money.

**6). Accounting Period Concept:**

Even though it is assumed that business will continue to exist for a long period, it is necessary to keep accounts in such a way that the results are known at frequent intervals. Accountants generally adopt a twelve month period for measuring the income of a concern. This time interval is called ‘Accounting Period ’.

**Accounting Conventions**

Accounting Conventions refer to customs, traditions, usages or practices followed by accountants as a guide in preparation of financial statement. They are followed to make the financial statements clear and meaningful.

**1). Convention of Consistency:**

The convention of consistency signifies that the accounting practices and methods should remain consistent (unchanged) from one accounting year to another. In other words, accounting practices should remain the same from one period to another. Comparison of results from one period to another is possible only when same accounting rules are followed. For example, if a concern adopts Written down value method of depreciation in one year and Straight line method of depreciation in another year, then it will be difficult to make comparison between the results of the two periods. Sometimes, wrong conclusions may be drawn. If change becomes necessary the change and its effect should be stated clearly.

**2). Convention of Disclosure:**

The convention of disclosure means that all the material facts must be disclosed in the financial statements. For example, in case of sundry debtors not only the total amount of sundry debtors should be disclosed, but also the amount of good, bad and doubtful debtors should be stated. Full disclosure does not mean disclosure of each and every item of information. It only means disclosure of such information which is of significance to owners, investors and creditors.

**3). Convention of Materiality:**

According to this convention, a detailed record is made only of those business transactions which are material (i.e.significiant). Accounts must not be over burdened with unnecessary minute details. Only material facts should be disclosed. “An item should be regarded as material if there is reason to believe that knowledge of it would influence the decision of informed investors.” Hence, unimportant matters should be either left out or merged with other items.

**4). Convention of Conservatism:**

This convention is based on the policy of ‘playing safe’. According to this convention all possible or expected losses should be provided for but unearned or unrealized profit should be left out. Examples of application of this convention are valuation of stock at cost price or market price, whichever is less, making provision for doubtful debts, or any other reserves and provisions etc. The idea behind the convention of conservatism is that the financial position of a firm should not be shown better than what it is…

**DOUBLE - ENTRY SYSTEM**

Every transaction has two aspects. When we receive something, we give something else in return. For example, when we purchase goods for cash, we receive goods and give cash in return. Similarly, when we sell goods on credit, goods are given and the customer becomes debtor. This method of writing every transaction in two accounts is known as Double-Entry System. Every transaction is divided into two aspects, debit and credit. One account is to be debited and another account is to be credited for every transaction in order to have a complete record of the same. Every transaction affects two accounts in opposite direction. A transaction has to be recorded in two different accounts in opposite sides for an equal value. Both the accounts cannot be debited or credited. One account has to be debited and the other account has to be credited. The basic principle of Double-Entry System of Book-Keeping is that for every debit there is a corresponding credit of equal value.

Stages of Double-Entry System:

The following are the three stages of a complete system of double-entry:

1). All transactions are first recorded in Journal or Subsidiary Books as and when they

take place.

2). All entries in the Journal or Subsidiary Books are posted in the Ledger.

3). All the accounts are closed or balanced and Final Accounts are prepared.

When these steps are completed, the cycle begins for the next year.

**Classification of Accounts:**

An account is a summary of the record of all the transactions relating to a person, asset, expense or gain. It has two sides – the left hand side called the Debit side and the right hand side, called Credit side.

Accounts are broadly classified into three heads.

1). Personal Accounts. 2). Real Accounts. 3). Nominal Accounts.

**Personal Accounts:**

Personal Accounts are accounts of persons with whom a concern carries on business. Personal accounts may be:

a). Accounts of natural persons such as Gopal, Suresh etc.

b). Accounts of artificial persons, ( Banks, Institutions, & Companies etc. are artificial persons). Such as Syndicate Bank, Reliance Company, etc.

c ).Representative Personal Accounts such as outstanding salaries, prepaid insurance etc.

**Real Accounts:**

Accounts relating to properties or assets of a trader are known as real accounts. It includes tangible assets such as building, furniture, cash etc and also intangible assets such as goodwill, trade marks etc. (All purchases and sales also comes under real account only)

**Nominal Accounts:**

Accounts dealing with expenses, losses, gains and incomes are called Nominal Accounts. Examples: Salaries, Rent, Commission, Interest paid or received etc.

**Basic Accounting Rules or Conventional Rules**

**There are three rules for recording the transactions:**

**Personal Accounts:**

**Debit The Receiver.**

**Credit The Giver.**

**Real Accounts:**

**Debit What comes in.**

**Credit What goes out.**

**Nominal Accounts:**

**Debit Expenses and Losses.**

**Credit Incomes and Gains.**

**JOURNAL**

‘Journal means a day book or daily record. It is the book where in all the transactions are first recorded in chronological order (i.e. as and when they take place). It is a book of prime, original or first entry, as all business transactions are first recorded in the journal. From journal the posting are made in the Ledger. The process of recording transactions in journal is termed as ‘journalising’. The journal is ruled as follows:

**Journal**

1 2 3 4 5

| Date | Particulars | L.F. | Debit  Amount  Rs. | Credit  Amount  Rs. |
| --- | --- | --- | --- | --- |
| Year  Month Day | Name of A/c (To be debited) ………Dr  To Name of A/c (To be credited)  (Narration or explanation) |  | xxx | xxx |

Column ( 1 ) (Date) : the date on which the transaction took place in entered in this column. The year is written on the top, then the date column is divided in to two parts, the first part is used for writing the month and the second part is used for writing the date.

Column ( 2 ) (Particulars). In the first line, the name of the account to be debited is written. The word ‘Dr. i.e. the abbreviation of the term ‘Debit’ is written at the end of the first line. In the second line some space is left and the word ‘To’ is written before the name of the account to be credited, then the name of the account to be credited is written. A brief explanation, usually beginning with the word ‘Being’ or ‘For’ is written called ‘narration’. The ‘narration’ helps one to understand the nature and purpose of the journal entry at a future date. To separate one entry from another, a line is drawn below every entry to cover particulars column only. The line does not extend to other columns.

Column ( 3 ) (L.F). L.F. stands for ‘ledger folio’ in this column the page numbers on which the various accounts appear in the ledger are entered.

Column ( 4 ) (Debit Amount ) in this column the amount to be debited against the debit account is written.

Column ( 5 ) (Credit Amount) in this column, the amount to be credited against the credit account is written.

**Steps required for Journalising:**

For Journalising a transaction, i.e. for passing an entry for a transaction in the Journal, the following steps are required to be taken.

1). First ascertain the two accounts involved in the transaction. It should be noted that the account of firm in whose books the transaction is recorded should not be taken into account, as the entry is passed in the books of that firm. Only the accounts of other persons with whom the firm deals, accounts of assets, liabilities, gains & incomes, expenses & losses of the business should be considered.

2). Then see the nature of the accounts involved, i.e. see whether they are persona, real or nominal accounts.

3). Then apply the corresponding or relevant rules for debit and credit and find out which accounts is to be debited and which account is to be credited. It one account is debited, the other account is credited. Both the accounts cannot be only debited or only credited.

**Points to be noted while passing journal entries:**

1). For the purpose of accounting, the proprietor should be considered as separate entity and all transactions with him should be recorded in the books. When the proprietor brings cash, stock or any other asset into the business, then his capital account should be credited. When cash, stock etc is withdrawn from business, then Drawings account should be debited. When the personal expenses of the proprietor such as life insurance premium, income tax etc are paid by the firm then Drawings account should be debited. At the end of the year, Drawings account is closed by transfer to Capital account.

2). If the proprietor takes loan from wife for carrying on business then his wife’s loan account and not capital account should be credited.

3). When it is not clearly stated in the transaction whether goods are purchased for cash or credit the purchase should be considered as cash purchases if the name of the supplier of goods is not given. On the other hand, if the name of the supplier is given without stating whether it is for cash or credit then purchase should be considered as credit purchases.

4). Whenever goods are purchased for cash from a party, then the name of the party from whom goods are purchased should be ignored. The amount due to him is already paid, there is no further liability towards him.

5). Whenever cash is paid to a person for an expense, say salary, rent etc the two concerned accounts involved in the transaction are ( 1 ) concerned expense account and ( 2 ) cash account. The personal account of the party to whom the payment is made is not at all involved because payment is made to him for service already rendered by him and he is not liable to pay us any amount at a later date. Similarly, when some income such as interest, commission etc is received from a party, then party’s account should not be taken into account.

**Opening and Closing Entries:**

Any business concern will be started with an intention to continue in the future indefinitely, but it closes its business operations at the end of an accounting period by closing the books of accounts and recommencing the same by opening a new set of books of accounts from the next day. In this process of closing and opening the books of accounts, it is required to pass a closing entry to close the books of accounts and an opening entry to open the books of accounts of the next accounting period.

A journal entry, by means of which the balances of various assets, liabilities and capital appearing in the balance sheet of previous accounting period are brought forward in the books of current accounting period, is known as ‘Opening Entry’.

While passing an opening entry, all asset accounts are debited and all liabilities accounts are credited. The excess of assets over liabilities is the proprietor’s or owner’s capital and is credited to his capital account.

**Example**:

Pass the ‘Opening Entry’ on January 1, 2009 with the following information about a business.

Cash in hand Rs. 2,000

Cash at bank Rs. 4,000

Closing Stock Rs. 5,000

Land and buildings Rs. 25,000

Plant and machinery Rs. 30,000

Debtors Rs. 4,000

Creditors Rs. 10,000

Bills payable Rs. 5,000

**Dr. Journal Cr.**

| Date | Particulars | L.F. | Debit | Credit |
| --- | --- | --- | --- | --- |
| Jan, 1, 2009 | Cash A/c---------------------------Dr  Bank A/c---------------------------Dr  Stock A/c--------------------------Dr  Land & Buildings A/c-----------Dr  Plant & Machinery A/c---------Dr  Debtors A/c-----------------------Dr  To Creditors A/c  To Bills Payable A/c  To Capital A/c (balancing figure)  (Being balances brought forward from the last year.) |  | 2,000  4,000  5,000  25,000  30,000  4,000 | 10,000  5,000  55,000 |

# LEDGER

After Journalising the transactions, the entries in the journal are transferred to appropriate accounts in the Ledger to know the exact position of each account on any particular date. Ledger is a book in which various Personal, Real and Nominal Accounts are opened and posting are made. It is a book of final entry. All business transactions are first recorded in the Journal and then recorded in Ledger. The process of transferring the transactions from Journal to the Ledger is called ‘Posting’.

Each Ledger Account has the shape of English Alphabet ‘T’. Each account in the Ledger is divided into two equal parts. The left hand side of the account is known as ‘Debit’ side and the right hand side is called ‘Credit’ side. Each of the two sides is further divided into four columns namely, Date, Particulars, J.F. and Amount.

A Ledger Account is ruled as follows:

# Name of the Account

**Dr**

| Date | Particulars | J.F | Amount | Date | Particulars | J.F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | To (Name of the account which is credited) |  |  |  | By (Name of the account which is credited) |  |  |

**Steps for posting:**

1). Date column:

In this column, date of the transaction is recorded.

2). Particulars:

This column is meant for the recording the details of the transaction. Every entry on the debit side of this column much be prefixed with the word ‘To’ and on the credit side with the word ‘By’. On the debit side after the word ‘To’ write Name of the credit part of Journal Entry. On the credit side, after the word ‘By’ write Name of the debit part of the Journal Entry.

3). J.F.Column:

J.F. stands for the page number of Journal from where the entry is posted.

4). Amount Column:

In this column the amount with which the account is debited or credited is written.

**Points to be noted:**

1). In the Ledger, a separate account should be opened for each account appearing in Journal.

2). For all the transactions relating to any particular account, only one ledger account should be opened.

3). The name of the account should be written in bold letters at the top and in the center of each account.

4). The word ‘Dr’.(abbreviation of debit) should be written at the left hand top corner of each account to indicate the debit side of the account, and the word ‘Cr’(abbreviation of credit) should be written at the right hand top corner of each account to indicate the credit side of the account.

5). The journal entries should be posted to the ledger accounts in the order of their dates.

6). While making posting in any ledger account, the name of that account should not appear either on the debit side or on the credit side of that account.

\*\* For example, in Rent Account, we cannot have To Rent Account or By Rent Account.

**Balancing of Ledger Accounts:**

After the transactions have been posted in the various accounts, they are balanced. The term ‘balance’ is an accounting term which means the difference between the two sides of an account. The following steps are followed for balancing the accounts:

1). Take the totals of the two sides of the account on a rough sheet.

2). Ascertain the difference between the totals of two sides. The difference is called ‘balance’.

3). Enter the difference in the amount column of the side showing less total. If the credit side total is less, then write in the particulars column ‘By balance c/d’ against the amount.

Similarly, if the debit side total is less, then write in the particulars column on the debit side ‘To balance c/d’ against the amount.

4). After putting the difference in the appropriate side of the account, add both the sides of the account. Draw a line above and below the totals.

5). At the beginning of the next accounting period, the balance is written on the opposite side with the words ‘To balance b/d’ or ‘By balance b/d’ as the case may be.

**Example:**

**Journalise the following transactions in the books of ABC & Co. Ltd and prepare necessary Ledger Accounts:**

1/1/2009 ABC & Co. Started business with Rs. 1,25,000

2/1/2009 Paid into Bank Rs. 25,000

4/1/2009 Purchased goods Rs. 10,000

5/1/2009 Sold goods Rs. 12,000

6/1/2009 Paid Salaries Rs. 5,000

9/1/2009 Purchased Machinery Rs. 40,000

10/1/2009 Purchased goods from Mr. A for Rs. 12,000

11/1/2009 Goods returned to Mr. A worth Rs. 2,000

15/1/2009 Paid to Mr. A in full settlement of A/c Rs. 9,950

18/1/2009 Interest received Rs. 1,000

19/1/2009 Sold goods to Mr. X - Rs. 15,000

20/1/2009 Returned goods by Mr. X worth Rs. 1,000

22/1/2009 Issued a cheque for Rs. 2,500 towards Rent

25/1/2009 Cheque received from Mr.X for 13,900 in full settlement

28/1/2009 Commission paid Rs. 800

30/1/2009 Sale of machinery Rs. 10,000

**Journal Entries in the books of ABC & Co. Ltd..,**

| **Date** | **Particulars** | **L.F** | **Debit** | **Credit** |
| --- | --- | --- | --- | --- |
| 1/1/2009  2/1/2009  4/1/2009  4/1/2009  6/1/2009  9/1/2009  10/1/2009  11/1/2009  15/1/2009  18/1/2009  19/1/2009  20/1/2009  22/1/2009  25/1/2009  28/1/2009  30/1/2009 | Cash A/c----------------------------Dr  To ABC & Co’s Capital A/c  (Being the business Commenced)  Bank A/c----------------------------Dr  To Cash A/c  (Being cash deposited in the bank)  Purchases A/c---------------------Dr  To Cash A/c  (Being goods purchased for cash)  Cash A/c----------------------------Dr  To Sales A/c  (Being goods sold for cash)  Salaries A/c------------------------Dr  To Cash A/c  (Being Salaries paid)  Machinery A/c----------------------Dr  To Cash A/c  (Being Machinery purchased for cash)  Purchases A/c---------------------Dr  To Mr. A A/c  (Being goods purchased from Mr. A on credit)  Mr. A’s A/c-------------------------Dr  To Purchase returns A/c  (Being goods returned to Mr. A)  Mr. A’s A/c-------------------------Dr  To Cash A/c  To Discount A/c  (Being cash paid to Mr. A in full settlement of account)  Cash A/c----------------------------Dr  To Interest A/c  (Being interest received in cash)  Mr. X’s A/c-------------------------Dr  To Sales A/c  (Being goods sold to Mr. X on credit)  Sales returns A/c-----------------Dr  To Mr. X A/c  (Being goods returned by Mr. X on account of defectiveness)  Rent A/c----------------------------Dr  To Bank A/c  (Being rent paid by cheque)  Bank A/c---------------------------Dr  Discount A/c----------------------Dr  To Mr. X A/c  (Being cheque received from Mr. X in full settlement)  Commission A/c--------------------Dr  To Cash A/c  (Being Commission paid)  Cash A/c-----------------------------Dr  To Machinery A/c  (Being Machinery sold) |  | 1,25,000  25,000  10,000  12,000  5,000  40,000  12,000  2,000  10,000  1,000  15,000  1,000  2,500  13,900  100  800  10,000 | 1,25,000  25,000  10,000  12,000  5,000  40,000  12,000  2,000  9,950  50  1,000  15,000  1,000  2,500  14,000  800  10,000 |

**Ledger Accounts:**

**Cash Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1/1/2009  5/1/2009  18/1/2009  30/1/2009  1/2/2009 | To ABC & Co.’s capital A/c  To Sales A/c  To Interest A/c  To Machinery  By Balance B/d |  | 1,25,000  12.000  1,000  10,000  1,48,000  57,350 | 2/1/2009  4/1/2009  6/1/2009  9/1/2009  15/1/2009  28/1/2009  31/1/2009 | By Bank A/c  By Purchases A/c  By Salaries A/c  By Machinery A/c  By Mr. A’s A/c  By Commission A/c  By Balance C/d |  | 25,000  10,000  5,000  40,000  9,950  800  57,350  1,48,000 |

**ABC Co. ‘s Capital Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/2009 | To Balance C/d |  | 1,25,000  1,25,000 | 1/1/2009  1/2/2009 | By Cash A/c  By Balance B/d |  | 1,25,000  1,25,000  1,25,000 |

**Bank Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 2/1/2009  25/1/2009  1/2/2009 | To Cash A/c  To Mr. X’s A/c  To Balance B/d |  | 25,000  13,900  38,900  36,400 | 22/1/2009  31/1/2009 | By Rent A/c  By Balance C/d |  | 2,500  36,400  38,900 |

**Purchases Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 4/1/2009  10/1/2009  1/2/2009 | To Cash A/c  To Mr. A’s A/c  To Balance B/d |  | 10,000  12,000  22,000  22,000 | 31/1/2009 | By Balance C/d |  | 22,000  22,000 |

**Sales Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/2009 | To Balance C/d |  | 27,000  27,000 | 5/1/2009  19/1/2009  1/2/2009 | By Cash A/c  By Mr. X’s A/c  By Balance B/d |  | 12,000  15,000  27,000  27,000 |

**Salaries Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 6/1/2009  1/2/2009 | To Cash A/c  To Balance B/d |  | 5,000  5,000  5,000 | 31/1/2009 | By Balance C/d |  | 5,000  5,000 |

**Machinery Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 9/1/2009  1/2/2009 | To Cash A/c  To Balance B/d |  | 40,000  40,000  30,000 | 30/1/2009  31/1/2009 | By Cash A/c  By Balance C/d |  | 10,000  30,000  40,000 |

**Mr. A’s Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 11/1/2009  15/1/2009  15/1/2009 | To Purchase returns A/c  To Cash A/c  To Discount A/c |  | 2,000  9,950  50  12,000 | 10/1/2009 | By Purchases A/c |  | 12,000  12,000 |

**Purchase Returns Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/2009 | To Balance C/d |  | 2,000  2,000 | 11/1/2009  1/2/2009 | By Mr. A’s A/c  By Balance B/d |  | 2,000  2,000  2,000 |

**Discount Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 25/1/2009 | To Mr. X’s A/c |  | 100 | 15/1/2009 | By Mr. A’s A/c |  | 50 |

**Interest Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/2009 | To Balance C/d |  | 1,000  1,000 | 18/1/2009  1/2/2009 | By Cash A/c  By Balance B/d |  | 1,000  1,000  1,000 |

**Mr. X’s Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 19/1/2009 | To Sales A/c |  | 15,000  15,000 | 20/1/2009  25/1/2009  25/1/2009 | By Sales Returns A/c  By Bank A/c  By Discount A/c |  | 1,000  13,900  100  15,000 |

**Sales Returns Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 20/1/2009  1/2/2009 | To Mr. X’s A/c  To Balance B/d |  | 1,000  1,000  1,000 | 31/1/2009 | By Balance C/d |  | 1,000  1,000 |

**Rent Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 22/1/2009  1/2/2009 | To Bank A/c  To Balance B/d |  | 2,500  2,500  2,500 | 31/1/2009 | By Balance C/d |  | 2,500  2,500 |

**Commission Account**

**Dr. Cr.**

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 28/1/2009  1/2/2009 | To Cash A/c  To Balance B/d |  | 800  800  800 | 31/1/2009 | By Balance C/d |  | 800  800 |

# Subsidiary Books

When business transactions are very few, there is only one Journal where in all transactions are recorded. In big business concerns, recording of all transactions in one journal and then posting them into ledger will be very inconvenient and will involve a lot of clerical work. Moreover, transactions are usually of repetitive nature. To overcome this difficulty big business concerns adopt system of Subsidiary Books. Under the system of Subsidiary Books, instead of maintaining only one book of original entry called Journal for all types of transactions, several books of original entry called Subsidiary Books are maintained. Subsidiary Books are books of original as all the transactions are first recorded in these books before they are recorded in respective accounts in ledger. These special journals are called Subsidiary Books because they are subsidiary to the Principal or Main book namely Ledger. Normally the following Subsidiary Books are used in business.

1. Cash Book
2. Purchase Book
3. Sales Book
4. Purchase Returns Book
5. Sales Returns Book
6. Bills Receivable Book
7. Bills Payable Book
8. Journal Proper

## Cash Book:

The Subsidiary Book maintained for recording cash transactions is called the Cash Book. Cash Book is a book of prime or first entry, bcoz all cash transactions are first recorded in the Cash Book. It is also a book of final entry (i.e. Ledger) as Cash Book itself serves as cash account and bank account. Cash Book can be of any one of the following types.

1. Simple Cash Book or Cash Book with only Cash Columns
2. Two-Column Cash Book or Cash Book with Cash and Discount or Cash Book with Discount and Bank Columns.
3. Three- Column Cash Book with Cash, Discount and Bank Columns.

In case of Simple Cash Book a record of all cash receipts and payments is made. Receipts are entered on the debit side and payments on the credit side.

The proforma of Simple Cash Book will be as follows:

**Simple Cash Book:**

**Dr Cr**

| Date | Particulars | L.F | Amount | Date | Particulars | L.F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |

**Example:**

1/1/ 2009 Commenced business with Rs. 40,000

2/1/2009 Purchased goods for Rs. 8,000

3/1/2009 Rent paid Rs. 1,000

4/1/2009 Sold goods Rs. 10,000

5/1/2009 Machinery purchased for Rs. 12,000

6/1/2009 Interest Received Rs. 900

**Simple Cash Book:**

**Dr Cr**

| Date | Particulars | L.F | Amount | Date | Particulars | L.F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1/1/2009  6/1/2009  1/2/2009 | To Capital A/c  To Interest A/c  To Balance B/d |  | 40,000  900  40,900  19,900 | 2/1/2009  3/1/2009  5/1/2009  31/1/2009 | By Purchases A/c  By Rent A/c  By Machinery A/c  By Balance C/d |  | 8,000  1,000  12,000  19,900  40,900 |

**Two-Column Cash Book**

In case of Cash Book with Discount Columns, an additional column on each side of Cash Book is provided for Discount. Discount column on the debit side represents cash discount allowed to customers and credit side indicates cash discount received from creditors. Cash columns are balanced like other ledger accounts but discount columns are not balanced but totaled.

The proforma of Two-Column Cash Book will be as follows:

# Cash Book with Discount and Cash Columns

**Dr Cr**

| Date | Particulars | L.F | Discount | Cash | Date | Particulars | L.F | Discount | Cash |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |

Example:

1/4/2009 Commenced business with Rs. 50,000

3/4/2009 Purchased goods from Mr. X for Rs. 6,000

4/4/2009 Goods returned to Mr. X worth Rs. 500

5/4/2009 Sold goods worth Rs. 9,000

6/4/2009 Machinery Purchased Rs. 10,000

7/4/2009 Cash paid to Mr. X – Rs. 5,400 in full settlement of account

8/4/2009 Sold goods to Mr. A worth Rs, 7,500

9/4/2009 Paid Insurance Rs. 600

10/4/2009 Mr. A Pays Rs. 7,450 in full settlement of account

11/4/2009 Rent Received Rs. 1,500

# Cash Book with Discount and Cash Columns

**Dr Cr**

| Date | Particulars | F | Discount | Cash | Date | Particulars | F | Discount | Cash |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1/4/09  5/4/09  10/4/09  11/4/09  1/5/09 | To Capital A/c  To Sales A/c  To Mr. A’s A/c  To Rent A/c  To Balance B/d |  | 50 | 50,000  9,000  7,450  1,500  67,950  51,950 | 6/4/09  7/4/09  9/4/09  30/4/09 | By Machinery A/c  By Mr. X’s A/c  By Insurance A/c  By Balance C/d |  | 100 | 10,000  5,400  600  51,950  67,950 |

**NOTE:** Transactions dated 3rd, 4rth and 8th April will not be placed in cash book, because they are credit purchases, purchases returns and credit sales made by the firm and they don’t effect the cash balance.

# Cash Book with Discount and Bank Columns

### Dr Cr

| Date | Particulars | L.F | Discount | Bank | Date | Particulars | L.F | Discount | Bank |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |

In certain organizations cash transactions will be replaced by bank transactions, then we have to prepare a cash book with bank and discount columns. Usually to minimize the scope for manipulations or fraud transactions are carried out through bank. All receipts are received in the form of cheques. And all payments are made by issuing cheques.

**Example:**

***In the above example assume all transactions are carried through bank, i.e.., all payments are made by issuing a cheque and all receipts are received in the form of a cheque. Then we will prepare a cash book with bank and discount columns. Cash column is replaced by Bank column.***

**Cash Book with Discount and Bank Columns**

**Dr Cr**

| Date | Particulars | F | Discount | Bank | Date | Particulars | F | Discount | Bank |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1/4/09  5/4/09  10/4/09  11/4/09  1/5/09 | To Capital A/c  To Sales A/c  To Mr. A’s A/c  To Rent A/c  To Balance B/d |  | 50  50 | 50,000  9,000  7,450  1,500  67,950  51,950 | 6/4/09  7/4/09  9/4/09  30/4/09 | By Machinery A/c  By Mr. X’s A/c  By Insurance A/c  By Balance C/d |  | 100  100 | 10,000  5,400  600  51,950  67,950 |

# Three-Column Cash Book

The Cash Book which contains Bank Column in addition to Discount and Cash Columns is called Three-Column Cash Book or Cash Book with Discount, Cash, Bank Columns.

Proforma of Three-Column Cash Book

# Three-Column Cash Book

| Date | Particulars | L.F | Discount | Cash | Bank | Date | Particulars | L.F | Discount | Cash | Bank |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |

The following points should be noted while preparing three-column cash book.

1. The opening balance of cash in hand and cash at bank is written on the Debit side as ‘To balance b/d’, the amount of cash in hand is written in cash column and of cash at bank in bank column. In case of bank overdraft (credit balance) it is written on the debit side as ‘By balance b/d’
2. All receipts will be written on the debit side. Cash receipts will be entered in cash column and cheques in bank column.
3. If a cheque is received and deposited in the bank on the same day, then it should be entered in the bank column on the debit side.
4. A cheque received but not deposited in bank on the same day must be first debited in cash column and when it is deposited in bank on some other day, it should be treated as deposit of cash in the bank. However, in the absence of any information cheque received may be entered in the Bank Column on the assumption that it is deposited in bank for collection on the same day. If any discount is allowed while receiving cash or cheque then it should be entered in discount column on the debit side.
5. All payments are entered on the credit side, cash payment in cash column and payments through cheque in bank column. If any discount is received while making cash or bank payment, then it should be entered in discount column on the credit side.
6. **Contra entries:** If cash is deposited in the bank, it should be entered in the bank column on the debit side as ‘To Cash’ and again on the credit side in cash column as ‘By Bank’. If cash is withdrawn from bank for office use, it should be entered in cash column on the debit side as ‘To Bank’ and again on the credit side in bank column as ‘By Cash’
7. If cheque is drawn for personal use, it was to be entered in the bank column on the credit side as ‘By Drawings Account’. In such a case no contra entry is involved.
8. If interest or dividend on securities is collected by the bank as per standing instructions, then it has to be entered in the bank column on the debit side as ‘To Interest / Dividend on Shares’
9. If a cheque received from a customer and deposited in the bank is dishonoured, then the entry passed for receipt of cheque has to be cancelled by reversing it. Similarly, if a cheque issued to creditor is dishonoured then the entry passed for the issue of cheque has to be cancelled by reversing it.
10. **Balancing:** The discount columns are totaled but not balanced. The cash columns are balanced exactly in the same manner as in case of simple cash book. The process is similar for balancing the bank column also. It is possible that the bank may allow the firm to withdraw more than the amount deposited i.e. to have an overdraft. In such a case the total of the bank column on the credit side will be bigger than the one on the debit side. The difference is written on debit side as ‘To Balance c/d’. Then the totals are written. For the next period the balance is entered on the credit side as ‘By Balance b/d’.

**Example:**

1/1/2009 Shiv started business with cash balance of Rs. 60,000 and bank balance of Rs. 10,000

2/1/2009 Paid cash into bank Rs. 5,000

3/1/2009 Rent Paid Rs. 2,000

4/1/2009 Purchased goods for Rs. 10,000

5/1/2009 Bought Furniture for Rs. 4,000 and amount paid by cheque

6/1/2009 Purchased goods worth Rs. 9,000 from Ram

7/1/2009 Sold Goods worth Rs. 11,000

8/1/2009 Salaries Paid Rs. 3,000

9/1/2009 Interest Received Rs. 1,500

10/1/2009 Sold goods worth Rs. 14,000 to Vishnu

11/1/2009 Rs. 8,900 paid to Ram in full settlement of account

12/1/2009 Withdrew Rs. 2,000 from bank for office purpose

13/1/2009 Cheque received from Vishnu Rs. 13,920 in full settlement. **Cheque was deposited in the bank on 15th jan, 2009.**

16/1/2009 Withdrew Rs. 1,000 from bank for personal use.

**Dr Cr**

| Date | Particulars | F | Dis | Cash | Bank | Date | Particulars | F | Dis | Cash | Bank |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1/1/09  2/1/09  7/1/09  9/1/09  12/1/09  13/1/09  15/1/09  1/2/09 | To Capital A/c  To Cash A/c  To Sales A/c  To Interest A/c  To Bank A/c  To Vishnu A/c  To Cash A/c  To Balance B/d | C  C | 80  80 | 60,000  11,000  1,500  2,000  13,950  88,450  44,600 | 10,000  5,000  13,950  28,950  22,950 | 2/1/09  3/1/09  4/1/09  5/1/09  8/1/09  11/1/09  12/1/09  15/1/09  16/1/09  31/1/09 | By Bank A/c  By Rent A/c  By Purchases  By Furniture A/c  By Salaries A/c  By Ram’s A/c  By Cash A/c  By Bank A/c  By Drawings A/c  By Balance C/d | C  C  C | 100  100 | 5,000  2,000  10,000    3,000  8,900  13,950  1,000  44,600  88,450 | 4,000  2,000  22,950  28,950 |

**Purchases Book:**

It is used for recording all credit purchases of goods for resale. Purchase of goods for cash and purchase of other things which are not for re-sale are not recorded in the purchases book. It provides columns for the date of purchase, the invoice number, the name of the party, ledger folio and the amount of purchase. Purchases book is closed periodically. At the end of the period purchases book is totaled and postings are made. Debit purchases account with the total as ‘To sundries as per purchases book’. Credit each suppliers account with the amount of purchases made from him as

‘By purchases A/c’.

**Example:**

January 1, 2009 bought goods worth Rs.10,000 from Mr. X, his invoice No. 101

January 5, 2009 purchased goods worth Rs.15,000 from Mr. Y, his invoice No. 107

January 10, 2009 purchased goods worth Rs. 22,000 from Mr. Z, his invoice No. 111.

Record the above transactions in the purchases book and prepare the concern ledger accounts.

**Purchases Book**

| Date | Particulars | Invoice No. | Ledger Folio | Amount |
| --- | --- | --- | --- | --- |
| 1/1/2009  5/1/2009  10/1/2009  31/1/2009 | Mr. X  Mr. Y  Mr. Z  Total for the month | 101  107  111 |  | 10,000  15,000  22,000  47,000 |

**Purchases Account**

**Dr. Cr.**

| Date | Particulars | Folio | Amount | Date | Particulars | Folio | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/09 | Sundries as per Purchases Book |  | 47,000 |  |  |  |  |

**Mr. X Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/09 | To Balance c/d |  | 10,000  10,000 | 1/1/09  1/2/09 | By Purchases A/c  To Balance b/d |  | 10,000  10,000  10,000 |

**Mr. Y Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/09 | To Balance c/d |  | 15,000  15,000 | 5/1/09  1/2/09 | By Purchases A/c  To Balance b/d |  | 15,000  15,000  15,000 |

**Mr. Z Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/09 | To Balance c/d |  | 22,000  22,000 | 10/1/09  1/2/09 | By Purchases A/c  To Balance b/d |  | 22,000  22,000  22,000 |

**Sales Book:**

Sales Book is used to record all credit sale of goods in which the firm deals. Sale of an asset or cash sales are not recorded in sales book. The rulings of the sales book is same as that of purchases book.

**Example:**

Prepare a Sales book from the following information and prepare the concern ledgers.

!/4/09 Sold goods worth Rs. 5,000 to Mr. A, invoice No.201

4/4/09 Sold goods worth Rs. 11,ooo to Mr. B, invoice No. 206

9/4/09 Sold goods worth Rs. 18,000 to Mr. C, invoice No. 208

10/4/09 Sold goods for cash Rs. 20,000

**Sales Book**

| Date | Particulars | Invoice No. | Ledger Folio | Amount |
| --- | --- | --- | --- | --- |
| 1/4/2009  4/4/2009  9/4/2009  30//4009 | Mr. A  Mr. B  Mr. C  Total for the month | 201  206  208 |  | 5,000  11,000  18,000  34,000 |

**The transaction dated 10/4/09 is not recorded in the Sales Book as it is a cash transaction. (only credit sales will be recorded in the Sales Book)**

**Sales Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | 30/4/09 | By Sundries as per Sales Book |  | 34,000  34,000 |

**Mr. A Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1/4/09  1/5/09 | To Sales  To Balance b/d |  | 5,000  5,000  5,000 | 30/4/09 | By Balance c/d |  | 5,000  5,000 |

**Mr. B Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 4/4/09  1/5/09 | To Sales  To Balance b/d |  | 11,000  11,000  11,000 | 30/4/09 | By Balance c/d |  | 11,000  11,000 |

**Mr. C Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 9/4/09  1/5/09 | To Sales  To Balance b/d |  | 18,000  18,000  18,000 | 30/4/09 | By Balance c/d |  | 18,000  18,000 |

**Purchase Returns Book:**

This book keeps a record of returns outwards i.e. return of goods bought.

Goods which are defective or faulty may be returned to the supplier. The particulars of such goods are recorded in the purchases returns book. When the goods are returned, a’ Debit note’ is prepared and sent along with the goods returned. It is called debit note because the concerned supplier’s account is debited .

**Example:**

Prepare Purchase Returns Book from the following details.

1/2/09 Goods worth Rs. 2,000 returned to Ram

5/2/09 Goods worth Rs. 1,000 returned to Sam

7/2/09 Goods worth Rs. 500 are returned to Hari.

**Purchase Returns Book**

| Date | Particulars | Debit Note No. | Ledger Folio | Amount |
| --- | --- | --- | --- | --- |
| 1/2/09  5/2/09  7/2/09  28/2/09 | Ram  Sam  Hari  Total for the month |  |  | 2,000  1,000  500  3,500 |

**Purchase Returns Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | 30/4/09 | By Sundries as per Purchase Returns Book |  | 3,500 |

**Ram Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1/2/09  1/3/09 | To Purchase Returns or Returns outward A/c  To Balance b/d |  | 2,000  2,000  2,000 | 29/2/09 | By Balance c/d |  | 2,000  2,000 |

**Sam Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 5/2/09  1/3/09 | To Purchase Returns A/c  To Balance b/d |  | 1,000  1,000  1,000 | 28/2/09 | By Balance c/d |  | 1,000  1,000 |

**Hari Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 7/2/09  1/3/09 | To Purchase Returns A/c  To Balance b/d |  | 500  500  500 | 28/2/09 | By Balance c/d |  | 500  500 |

**Sales Returns Book:**

This book is kept for recording returns inwards. When the customer returns defective or faulty goods, the particulars of such goods are recorded in the Sales Returns Book. The seller sends a credit note to customer informing him that he has credited the latter’s account with the value of the goods returned.

**Example:**

From the following information prepare a Sales Returns Book or Returns inward book.

1/1/09 Suresh returned Rs. 2,500 worth of goods

10/1/09 Rajesh returned Rs. 1,200 worth of goods

20/1/09 Mahesh returned Rs. 300 worth of goods

**Sales Returns Book**

| Date | Particulars | Credit Note No. | Ledger Folio | Amount |
| --- | --- | --- | --- | --- |
| 1/1/09  10/1/09  20/1/09  31/1/09 | Suresh  Rajesh  Mahesh  Total for the month |  |  | 2,500  1,200  300  4,000 |

**Sales Returns Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/09 | To Sundries as per Sales Returns Book |  | 4,000 |  |  |  |  |

**Suresh Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/09 | To Balance c/d |  | 2,500  2,500 | 1/1/09  1/2/09 | By Sales Returns A/c  To Balance b/d |  | 2,500  2,500  2,500 |

**Rajesh Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/09 | To Balance c/d |  | 1,200  1,200 | 10/1/09  1/2/09 | By Sales Returns A/c  To Balance b/d |  | 1,200  1,200  1,200 |

**Mahesh Account**

Dr. Cr.

| Date | Particulars | F | Amount | Date | Particulars | F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 31/1/09 | To Balance c/d |  | 300  300 | 20/1/09  1/2/09 | By Sales returns A/c  To Balance b/d |  | 300  300  300 |

**Bills Receivable Book and Bills Payable Book:**

These books are used for recording the details of bills received and bills accepted. The columns provided are for the date of the bill, drawer, drawee, payee, tenure, where payable, due date etc.

**Proforma of Bills Receivable Book**

| S. No. | Date of Receipt | From whom received | Name and Address of the acceptor | Where payable | Date of Bill | Term in months | When Due | L.F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |

**Proforma of Bills Payable Book**

| S. No. | Date of Bill | Name and Address of Drawer | Name and Address of Payee | Term in months | When Due | L.F | Amount |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |

**Journal Proper:**

It is used for recording only those transactions which cannot be recorded in any of the other subsidiary books.

**Types of Transactions recorded in Journal Proper:**

**1. Opening Entries:** An opening entry is passed in the Journal proper for bringing the balances of various assets, liabilities, and capital appearing in the balance sheet of the previous accounting period, in the books of current accounting period.

**2. Closing Entries:** Closing entries are passed in the Journal proper for closing the nominal accounts by transferring them to the trading and profit and loss account. These are needed at the end of the accounting year, when the final accounts are prepared.

**3. Transfer Entries:** Transfer entries are passed in the Journal proper for transferring an amount from one account to another account, i.e., transfer of total drawings from Drawings account to Capital account.

**4. Adjusting Entries:** Adjusting entries are passed in the Journal proper to bring into the books of accounts certain unrecorded items like closing stock, depreciation on fixed assets, outstanding and prepaid items. These are needed at the time of preparing the final accounts.

**5. Rectification Entries:** Rectifying entries are passed in the Journal proper to rectify the various errors committed while posting, totaling, balancing etc.

**TRIAL BALANCE**

We know that the fundamental principles of Double Entry System of Accounting is that for every debit, there must be a corresponding credit. Thus, for every debit or a series of debts given to one or several accounts, there is a corresponding credit or a series of credits of an equal amount given to some other account or accounts and vice versa. It follows, therefore, that the sum total of debit amounts should be equal to the credit amounts of the ledger at any date. But if the various accounts in the ledger are balanced, then the total of all debit balance must be equal to the total of all credit balances if the books of accounts are arithmetically accurate.

Thus at the end of the financial year or at any other time, the balances of all the ledger accounts are extracted and are written up in a statement known as Trial Balance and finally totaled up to see if the total of debit balances is equal to the total of credit balances. A Trial Balance may thus be defined as a statement of debit and credit totals or balances extracted from the various accounts in the ledger with a view to test the arithmetical accuracy of the books.

**Objectives of Trial Balance:**

The following are the main objectives of preparing the Trial Balance:

1. To have balances of all the accounts of the ledger in order to avoid the

necessity of going through the pages of the ledger.

2. To have a proof that the double entry of each transaction has been recorded

because of its agreement.

3. To have arithmetic accuracy of the books of accounts because of the

agreement of the trial balance.

4. To have material for preparing the profit and loss account and balance sheet

of the business.

**Pro forma of Trial Balance**:

Trial Balance of --------------- as on -----------------

| Particulars | Debit Balance | Credit Balance |
| --- | --- | --- |
|  |  |  |

**Preparation of Trial Balance:**

***Accounts showing Debit Balances:***

**1. All Expenses accounts.** (example: Salaries, Wages, Rent, General expenses, Advertisement expenses, Power charges, Trade Expenses etc..,)

**2. All Fixed Assets Accounts** ( examples: Land, Buildings, Plant and Machinery, Premises, Patents, Good will, Furniture, Fixture, Fittings, Vehicles, Loose Tools etc..,)

**3. All Current Assets Accounts**: (example: Cash in hand, Cash at Bank, Debtors, Bills Receivables, Short term securities, Closing stock etc..,)

**4. Losses accounts**: (example: Discount allowed by the business, Goods destroyed in fire, depreciation etc..,)

**5. Purchases Account**. (Purchases made by the business)

**6. Sales returns account**. (goods returned by the customer due to some defectiveness)

**7. Drawing Account**: (amount withdrawn by the owner will be treated as expense to the business)

***Accounts showing Credit Balances:***

**1. Long Term Liabilities account**. (examples: Capital, Long term loans taken by the business)

**2. Current Liabilities account.** (examples: Creditors, Bills payable, Over draft, Short term loans taken by the business, Outstanding expenses etc..,)

**3. All Incomes or Revenues accounts.** (examples: Sales, Interest received, Dividend received, Rent received, Commission received etc..,)

**4. Gains accounts:** (example: Discount received and any other gains and profits)

**5. Purchase returns account:** ( goods returned to the supplier of the goods due to some defectiveness.

**6. Provisions and Reserves accounts.** (example: Reserve for Bad or doubtful debts, Contingency reserve, General reserve etc..,)

**Example:**

From the following ledger balances, prepare a Trial Balance as on 31, Dec, 2009-10-2009

Cash at Bank 4,000

Cash in hand 55,000

Capital 2,50,000

Furniture 35,000

Machinery 1,45,000

Salaries 5,000

Purchases 82,000

Bills Payable 25,000

Sales 45,000

Debtors 35,000

Wages 2,000

Insurance 500

Stationery 1,500

Creditors 40,000

Returns outward 5,000

Trial Balance of \_\_\_\_\_\_\_\_\_\_ as on 31, Dec, 2009-10-20

| Particulars | Debit Balance | Credit Balance |
| --- | --- | --- |
| Cash at Bank  Cash in Hand  Capital  Furniture  Machinery  Salaries  Purchases  Bills Payable  Sales  Debtors  Wages  Insurance  Stationery  Creditors  Returns outward (purchase returns)  Total | 4,000  55,000  35,000  1,45,000  5,000  82,000  35,000  2,000  500  1,500  3,65,000 | 2,50,000  25,000  45,000  40,000  5,000  3,65,000 |

**Limitations of Trial balance:**

1. Trial Balance can be prepared only in those concerns where double entry

system of accounting is adopted.

2. Though the Trial Balance is agreed, there are certain errors which are not disclosed by the Trial Balance. That is why Trial Balance is not a conclusive proof of the accuracy of the books of accounts.

3. If the Trial Balance is not prepared correctly, then the final accounts prepared will not reflect the true and fair view of the state of affairs of the business.

**FINAL ACCOUNTS**

The main objectives of maintaining accounts are to find out the profit or loss made by the business at the end of periodical intervals and to ascertain the financial position of the business on a given date. After accuracy of the books of accounts are determined by means of preparing a Trial Balance, every businessman is interested in knowing about financial performance of the business. Final accounts are prepared to ascertain profit earned or loss suffered by the firm and also to know the Assets and Liabilities of the business at the end of each financial year. Final accounts summarise all the accounting information recorded in the subsidiary books and the ledger.

**TRADING ACCOUNT**

This account is prepared to know the trading results of the business. The sale proceeds are compared with the amount paid for purchases together with the expenses directly related to purchases. The difference between the sales and cost of goods sold is ‘Gross Profit’ or ‘Gross Loss’. If the sale proceeds exceed the cost of manufacturing, the difference will be Gross Profit, but if the sale proceeds are less than the cost of manufacturing, the difference will be Gross Loss.

The Gross Profit or Gross Loss as revealed by the Trading Account will be transferred to the Profit and Loss Account.

**The pro forma of a Trading Account is given as follows:**

**Trading Account of ------------------ for the year ended -------------**

**Dr Cr**

| **Particulars** | **Amount** | **Particulars** | **Amount** |
| --- | --- | --- | --- |
| To Opening Stock  To Purchases xxxx  Less: Purchase returns xx  ------  To Direct Expenses  To Carriage Inwards  To Wages  To Fuel and Power  To Manufacturing Exp.  To Coal, water & Gas  To Octroi Duty  To Import Duty  To Customs Duty  To Gross Profit (transferred to profit and loss account) | xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx | By Sales xxxx  Less: Sales returns xx  -------  B y Closing stock  By Gross Loss (transferred to profit and loss account) | xxxx  xxxx  xxxx |

**Profit and Loss Account**

After preparing a Trading Account, the next step is to prepare profit and loss account. The profit and loss account is opened with gross profit transferred from the Trading account ( or with gross loss which will be debited to the profit and loss account). The account is prepared to ascertain the net profit earned or net loss incurred by the business concern during an accounting period.

The Trading account simply tells about the gross profit or gross loss made by a businessman on purchasing and selling of goods. It does not take into account the other operating expenses incurred by the firm during the course of running the business. These expenses are of indirect in nature, they may be office and administrative, selling and distribution charges, extraordinary losses etc.., This account is prepared from nominal accounts and its balance is transferred to capital account as the whole profit or loss will be that of the owner and it will increase or decrease his capital.

**The specimen pro forma of this account is as follows:**

**Profit and loss account for the year ended ------**

**Dr Cr**

| Particulars | Amount | Particulars | Amount |
| --- | --- | --- | --- |
| To Gross Loss b/d  To Trade expenses  To Advertisement exp.  To Carriage outwards  To Salaries  To Rent, rates and taxes  To Bank charges  To Export expenses  To Travelling salesmen Salaries and commission  To Lighting charges  To Printing & Stationary  To Postage & Telegrams  To Telephone charges  To Legal charges  To Insurance  To Audit fee  To General expenses  To Repairs & Maintenance charges  To Discount (allowed)  To Interest on capital  To Interest on loans  To Dividend paid  To Bad debts  To Export Duty  To Any other indirect expenses  To Net Profit ( transferred to Capital A/c) | xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx | By Gross Profit b/d (from Trading A/c)  By Interest Received  By Dividend Received  By Commission Received  By Rent Received  By Discount Received  By Apprenticeship Premium  By Income from any other sources  By Net Loss ( transferred to Capital A/c) | xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx |

**Balance Sheet:**

Balance Sheet is prepared in order to know the financial position of business on a particular date. It is the statement and not an account. This statement is prepared from real and personal accounts left after all nominal accounts are transferred to Trading & Profit and Loss Account. The right hand side is called ‘Assets side’ and the left hand side is ‘Liabilities side’, Assets and Liabilities are shown in the Balance Sheet either in order of liquidity or permanency.

**A specimen pro forma of Balance Sheet is given below:**

**Balance sheet**

**As on ….**

| **Liabilities** | **Amount**  **Rs.** | **Assets** | **Amount**  **Rs.** |
| --- | --- | --- | --- |
| Capital:  Opening Balance(of Capital)  Add: Net Profit  Add: Interest on Capital  Less: Drawings  Less: Loss, if any →  Reserves  Loan on Mortgage  Sundry Creditors  Bills payable  All Outstanding Expenses  Income received in Advance  Bank Loan or Over Draft | \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \_\_\_\_\_\_\_  \*\*\*\*\*  \_\_\_\_\_\_\_ | Land & Buildings  Plant & Machinery  Furniture, Fixtures & Fittings  Patents & Trade Marks  Good will  Vehicles  Loose Tools  Sundry Debtors  Bills Receivables  Closing Stock  Cash in hand  Cash at Bank  Investments  Prepaid Expenses  Outstanding Incomes  Advances given | \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \*\*\*\*  \_\_\_\_\_\_\_  \*\*\*\*\*  \_\_\_\_\_\_\_ |

The following points should be noted while preparing Balance Sheet:

1. The Balance Sheet is prepared as on a particular date and not for a period. While preparing Trading and profit and Loss Account the words “For the year ended….” Are used. In case of Balance Sheet the words “As on …” or “As at…” are used.
2. Balance Sheet is not an account it is a statement so it does not have “Debit” and “Credit” sides.
3. The total of Assets side must be equal to the total of Liabilities (including Capital) i.e. the two sides of a Balance Sheet should always agree (unless there are omissions and mistakes).

**Adjustments:**

While preparing the Profit and Loss Account for a particular period it is essential that expenses, losses, incomes and gains relating only to that period are considered. For example, if accounts are prepared for the year 2000, then no income, gain, expense or loss relating to 1999 or 2001 should be included in Profit and Loss Account for the year 2000.

For ascertaining the true Trading result of a firm it is necessary that all items of income and revenue expenditure pertaining to the period of accounting must be recorded, irrespective of the fact whether they are received or not, paid or not, received in advance or paid in advance. Apart from this there are certain other items such as depreciation, provision for bad and doubtful debts, interest on capital etc. which must be adjusted before the correct profit can be ascertained. The following are some of the Adjustments, which are to be made at the end of the accounting period.

1. **Closing Stock:**

The unsold stock of goods remaining at the end of the accounting period is termed as “Closing Stock”. The adjustment entry is

Closing Stock A/c Dr

To Trading Account.

The two fold effect of the above adjustment will be ( 1 ) it will appear in Trading Account on the credit side and ( 2 ) on the Assets side of the Balance Sheet.

1. **Outstanding Expenses:**

Expenses, which have become due but not paid at the end of the finance year, are called outstanding expenses. The adjustment entry is

Expense Account Dr

To Outstanding Expenses A/c

The two fold effect is ( 1 ) it will be added to the concerned expense account, as the case may be and ( 2 ) Outstanding Expenses will be shown on the Liabilities side of the Balance Sheet.( Outstanding Expense is always a Current Liability)

1. **Unexpired or Prepaid Expenses:**

Expenses which have been paid in advance i.e. whose benefit will be available in future are called Unexpired or Prepaid Expenses.

Adjustment entry is

Prepaid Expenses Account Dr

To Expenses Account

The two fold effect of the adjustment is ( 1 ) it will be deducted from the concerned expense account in Trading or Profit and Loss account and ( 2 ) shown on the Assets side of the Balance Sheet as Prepaid Expenses ( Prepaid Expense is treated as a Current Asset)

1. **Outstanding Income or Accrued Income:**

That income which is earned but not received during the current accounting year is called Accrued Income.

Adjustment entry is

Accrued Income Account Dr

To Income Account.

The two fold effect will be ( 1 ) it will be added to the concerned income account in Profit and Loss Account on the credit side and ( 2 ) show in the Balance Sheet on the Assets side as Accrued or Outstanding Income.

→ If Interest Receivable or Accrued Interest is given in Trial Balance(instead of giving it in Adjustments) then it will appear only in Balance Sheet on the Assets side.

1. **Income Received in Advance:**

Income received but not earned during the accounting year (income relating to future year but received during the current accounting year) is called Income received in advance.

Adjustment entry is:

Income Account Dr

To Income Received in Advance.

The two fold effect is ( 1 ) it is deducted in Profit and Loss Account on the credit side from the concerned income account and ( 2 ) shown in Balance Sheet on the Liabilities side as Income Received in Advance.

→ If any Income Received in Advance is given in Trial Balance, (instead of giving that in Adjustments) then it will appear only in Balance Sheet on the Liabilities side.

1. **Depreciation:**

Depreciation is the reduction in the value of an Asset due to wear and tear, lapse of time etc.

The Adjustment entry is:

Depreciation Account Dr

To Asset Account.

The two fold effect is ( 1 ) Depreciation is shown on the debit side of Profit and Loss Account and ( 2 ) it is shown as a deduction from the concerned Asset Account in Balance Sheet.

→ If Depreciation on Machinery etc., is given in Trial Balance, then it will appear only in Profit and Loss Account on the Debit side.

→ It is advisable to ignore Depreciation on addition or sale of Asset if the date of transaction is not given.

1. **Interest on Capital:**

Some times Interest is provided on the Capital invested by the proprietor in the business. It is treated as business expense.

Adjustment entry is:

Interest on Capital Account Dr

To Capital Account

The two fold effect is ( 1 ) it is shown on the Debit side of Profit and Loss Account and ( 2 ) the amount of Interest on Capital is added to the Capital on the Liabilities side.

1. **Bad Debts:**

Debts that are irrecoverable, are called Bad Debts.

Adjustment entry is:

Bad Debt Account Dr

To Debtor’s Account.

The two fold effect is ( 1 ) it is shown on the Debit side of Profit and Loss Account and ( 2 ) shown on the Asset side of the Balance Sheet by way of deduction from Sundry Debtors.

1. **Provision for Bad and Doubtful Debts:**

The object of making Provision for Bad Debts is to bring down balance of Debtors to its true position. It is based on the Principle that all anticipated Losses should be provided before arriving at correct profit.

The amount of Doubtful Debts is calculated either by studying the position of each Debtor or by calculating it at some percentage on Sundry Debtors which is fixed on the basis of past experience.

It is to be noted that no provision for Bad Debts is created on Debtors which are definitely good or definitely bad.

Provision for Bad Debts is created by passing the following adjustment entry.

Profit and Loss Account Dr

To Provision for Doubtful Debts.

The Provision for doubtful debts given in Trial balance is the provision made during the last year. It is also called as “Old Provision” or “Existing provision”.

The provision for doubtful debts given in adjustment is current year provision. It is also called as “New Provision” or “Provision required”.

The treatment will be as follows:

**Profit and Loss Account**

Dr Cr

| To Provision for Doubtful Debts:    Bad Debts(given in Trial Balance \*\*\*  Add: Bad Debts (given in adjustments)  (writing off during the current  year, if any ) \*\*\*  Add: New Provision \*\*\*  \_\_\_\_\_  \*\*\*  Less: Existing Provision  (old provision) \*\*\*  \_\_\_\_\_  \*\*\* |  |
| --- | --- |

In case if the Old provision is more than the total of New provision and Bad Debts it will shown on the credit side of Profit and Loss Account.

In every case New Provision for Doubtful Debts will be deducted from Sundry Debtors.

**Balance Sheet**

Liabilities Assets

|  | Sundry Debtors \*\*\*\*  Less: Bad Debts ( given  In adjustments, if any) \*\*\*  Less: Provision for Doubtful  Debts.( New Provision) \*\*\* \*\*\*\*  → |
| --- | --- |

**Problems**

1) From the following figures prepare Trading and Profit and Loss Account for the year ended 31st December,2004 and Balance Sheet as that date:

Rs.

Capital 30,000

Drawings 6,000

Sundry Creditors 43,000

Bills Payable 4,000

Sundry Debtors 51,000

Bills Receivable 5,000

Loan advanced to Deepak & Co. 12,000

Fixtures and Fittings 8,500

Opening Stock 47,000

Cash in hand 900

Cash at Bank 12,500

Overdraft 6,000

Purchases 50,000

Duty and Clearing Charges 3,500

Sales 1,28,000

Salaries 9,500

Returns from customers 1,000

Return to creditors 1,100

Commission and travelers expenses 4,700

General Expenses 2,500

Rent paid 2,000

Commission Received 4,000

**Adjustments:**

1. Closing Stock Rs. 50,000
2. Interest to be received Rs. 200
3. Outstanding salaries Rs. 500
4. Depreciate Fixtures and Fittings by 10%.
5. Allow interest on capital at 8%.
6. Commission received in advance Rs.600

**Trading Account for the year ended 31st December, 2004**

Dr Cr

| Particulars | Amount | Particulars | Amount |
| --- | --- | --- | --- |
| To Opening Stock  To Purchases 50,000  Less Purchase  Returns 1,100  -------------  To Duty and Clearing Charges  To Gross Profit  (Transferred to Profit and Loss Account) | 47,000  48,900  3,500  77,600  1,77,000 | By Sales 1,28,000  Less Sales Returns 1,000  -----------  By Closing Stock | 1,27,000  50,000  1,77,000  ----------- |

**Profit and Loss Account for the year ended 31st December, 2004**

**Dr Cr**

| Particulars | Amount | Particulars | Amount |
| --- | --- | --- | --- |
| To Salaries 9,500  Add Outstanding  Salaries 500  --------  To Rent Paid  To Commission & traveling  Expenses →  To General Expenses  To Depreciation:  Fixtures and Fittings by 10%  ( 8,500\*10/100 ) →    To Interest on Capital at 8%  ( 30,000\*8/100 ) →  To Net Profit (Transferred to  Capital Account) | 10,000  2,000  4,700  2,500  850  2,400  58,750  81,200 | By Gross Profit (b/d from Trading Account)  By Commission received 4,000  Less: Received in  Advance 600  -------  By Interest to be received | 77,600  3,400  200  81,200 |

**Balance Sheet as on 31st December, 2004**

| Liabilities | Amount | Assets | Amount |
| --- | --- | --- | --- |
| Capital 30,000  Add Net Profit 58,750  Add Interest on Capital +  (8% on 30,000) 2,400  ---------  91,100  Less Drawings - 6,000  ----------  Creditors  Bills Payables  Overdraft  Outstanding Salaries  Commission received in advance | 85,150  43,000  4,000  6,000  500  600  1,39,250 | Fixtures and Fittings 8,500  Less Depreciation - 850  ( 10% on 8,500) --------  Sundry Debtors  Bills Receivables  Cash in hand  Cash at Bank  Closing Stock  Loan advance to Deepak & Co.  12,000  Add Interest to be received 200  ------- | 7,650  51,000  5,000  900  12,500  50,000  12,200  1,39,250 |

**2)** From the following Trial Balance as at 31st March, 2004, prepare Trading and Profit and Loss Account for the year ended 31st March and a Balance Sheet as on that date.

**Debit Balances Rs. Credit Balances Rs.**

Stock 45,000 Capital 75,000

Plant & Machinery 75,000 Sales 4,20,750

Purchases 2,25,000 Sundry Creditors 15,000

Trade Charges 10,000 Bad Debts Provision 200

Carriage Inwards 2,500 Bills Payable 2,000

Carriage Outwards 1,500

Factory Rent 1,500

Discount 350

Insurance 700

Sundry Debtors 60,000

Office Rent 3,000

Printing & Stationery 600

Traveller’s salary 2,800

Advertising 15,000

Bills Receivables 6,000

Drawings 6,000

Salaries 15,000

Wages 20,000

Furniture 7,500

Coal and Gas 1,000

Cash in hand 2,000

Cash at Bank 12,500

------------ -----------

5,12,950 5,12,950

------------ -----------

**Adjustments:**

1. Closing Stock amounted to Rs. 35,000
2. Depreciate Machinery by 10% and Furniture by 5%.
3. Raise the Bad debts provision t 5% on Debtors.
4. Outstanding factory rent Rs.300 and Office rent Rs.600
5. Insurance Prepaid Rs.100

**Trading Account for the year ended 31st March, 2004**

Dr Cr

| Particulars | Amount | Particulars | Amount |
| --- | --- | --- | --- |
| To Opening Stock  To Purchases  To Carriage Inwards  To Factory Rent 1,500  Add Outstanding rent 300  -------  To Wages  To Coal and Gas  To Gross Profit  (Transferred to Profit and Loss Account) | 45,000  2,25,000  2,500  1,800  20,000  1,000  1,60,450  4,55,750 | By Sales  By Closing Stock | 4,20,750  35,000  4,55,750 |

**Profit and Loss Account for the year ended 31st March, 2004**

Dr Cr

| Particulars | Amount | Particulars | Amount |
| --- | --- | --- | --- |
| To Trade Charges  To Carriage Outwards  To Discount allowed  To Insurance 700  Less Prepaid 100  -----→  To Office Rent 3,000  Add Outstanding rent 600  --------  To Printing & Stationery  To Traveller’s Salary  To Advertising  To Salaries  To Depreciation:  Machinery (10% on 75,000)  Furniture (5 % on 7,500)  To Bad debts Provision(on Debtors, 5% on 60,000) 3,000  Less Old Provision 200  -------  To Net Profit (Transferred to →  Capital Account) | 10,000  1,500  350  600  3,600  600  2,800  15,000  15,000  7,500  375  2,800  1,00,325  1,60,450  ------------ | By Gross Profit (b/d from Trading Account) | 1,60,450  1,60,450  ------------- |

**Balance Sheet as on 31st March, 2004**

| Liabilities | Amount | Assets | Amount |
| --- | --- | --- | --- |
| Capital 75,000  Add Net Profit 1,00,325  ----------  1,75,325  Less Drawings 6,000 Creditors  Bills Payables  Outstanding Expenses:  Factory Rent  Office Rent | 1,69,325  15,000  2,000  300  600  1,81,225 | Plant & Machinery 75,000  Less Depreciation (10%  On 75,000) 7,500  -----------  Furniture 7,500  Less Depreciation  (5% on 7,500) 375  ---------  Sundry Debtors 60,000  Less Bad debts Provision  (5% on debtors i.e.60,000) 3,000  --------  Bills Receivables  Cash in hand  Cash at Bank  Closing Stock  Prepaid Insurance | 67,500  7,125  57,000  6,000  2,000  12,500  35,000  100  1,81,225 |

**3.** On 31st March, 2000 the following figures are extracted from the books of Mr. ABC Prepare final accounts for the year after taking into account the following

**Adjustments:**

1. Depreciation 10% off plant and Fixtures.
2. Provide for March Rent unpaid Rs.150
3. Provide for Reserve for Bad Debts 2.5% on Debtors.
4. Outstanding wages Rs.800 and Salaries Rs.350
5. Stock on 31st March, 2000 Rs.16,580.

**Rs. Rs.**

Plant 55,000 Cash at Bank 2,245

Fixtures 1,720 Cash in hand 118

Capital 93,230 Sundry Debtors 48,000

Factory fuel and power 542 Sundry Creditors 22,880

Office Salaries 3,745 Purchases 83,290

Lighting (factory) 392 Wages 9,915

Sales 1,26,117 Rent and taxes 1,705

Travelling expenses 925 Office expenses 2,778

Carriage Outwards 380 Carriage Inwards 897

Discount 422 Return Outwards 3,172

Drawings 6,820 Bills Payable 6,412

Stock 21,725 Insurance prepaid 100

Manufacturing Expenses 2,940 Commission 260

Insurance 470 Returns Inwards 7,422

**Trading Account of Mr. ABC for the year ended 31st March, 2000**

Dr Cr

| Particulars | Amount | Particulars | Amount |
| --- | --- | --- | --- |
| To Opening Stock  To Purchases 83,290  Less Return Outwards 3,172  To Factory fuel and Power  To Lighting (factory)  To Carriage Inwards  To Manufacturing expenses  To Wages 9,915  Add Outstanding wages 800  To Gross Profit  (Transferred to Profit and Loss Account) | 21,725  80,118  542  392  897  2,940  10,715  17,946  1,35,275 | By Sales 1,26,117  Less Return Inwards 7,422  By Closing Stock | 1,18,695  16,580  1,35,275 |

**Profit and Loss Account of Mr. ABC for the year ended 31st March, 2000**

Dr Cr

| Particulars | Amount | Particulars | Amount |
| --- | --- | --- | --- |
| To Office Salaries 3,745  Add Outstanding Salaries 350  To Travelling Expenses  To Carriage Outwards  To Discount allowed  To Insurance  To Rent and Taxes 1,705  Add Unpaid Rent 150  To Office Expenses  To Commission  To Reserve for Bad Debts  (2.5% on Debtors, i.e on 48,000)  To Depreciation:  Machinery (10% on 55,000)  Fixtures ( 10% on 1,720) | 4,095  925  380  422  470  1,855  2,778  260  1,200  5,500  172  18,057 | By Gross Profit (b/d from Trading Account)  By Net Loss (Transferred to Capital Account) | 17,946  111  18,057 |

**Balance Sheet as on 31st March, 2004**

| Liabilities | Amount | Assets | Amount |
| --- | --- | --- | --- |
| Capital 75,000  Add Net Profit 1,00,325  ----------  1,75,325  Less Drawings 6,000 Creditors  Bills Payables  Outstanding Expenses:  Factory Rent  Office Rent | 1,69,325  15,000  2,000  300  600  1,81,225 | Plant & Machinery 75,000  Less Depreciation (10%  On 75,000) 7,500  -----------  Furniture 7,500  Less Depreciation  (5% on 7,500) 375  ---------  Sundry Debtors 60,000  Less Bad debts Provision  (5% on debtors i.e.60,000) 3,000  --------  Bills Receivables  Cash in hand  Cash at Bank  Closing Stock  Prepaid Insurance | 67,500  7,125  57,000  6,000  2,000  12,500  35,000  100  1,81,225 |

**UNIT – V**

**RATIO ANALYSIS**

The absolute accounting figures reported in the Financial Statements (combination of Trading, Profit and Loss Account & Balance Sheet) do not provide a meaningful understanding of the performance and financial position of a firm. An accounting figure conveys meaning when it is related to some other relevant information. Thus, the relationship between two accounting figures, expressed mathematically, is known as a financial ratio. This ratio indicates the quantitative relationship and assists the analyst to make qualitative judgement about the firm's financial position and performance.

**Significance of Ratio Analysis:**

1. The ability of a firm to meet its current obligations, i.e. liquidity position.
2. The extent to which the firm has used its long-term solvency for borrowing funds.
3. The efficiency of the firm in utilizing its various assets in generating sales revenue; and
4. The overall operating efficiency and performance of the firm.

**Types of Ratios:**

Several ratios can be calculated from the accounting data contained in the financial statements. From the financial analyst or financial manager point of view, the ratios are categorized into 4 types.

1. Liquidity Ratios.
2. Solvency Ratios or Capital Structure Ratios or Leverage Ratios.
3. Profitability Ratios.
4. Activity or Turnover or Operating Efficiency Ratios.

**I. LIQUIDITY RATIOS:**

Liquidity ratios measure the ability of a firm to meet its current liabilities/obligations. The liquidity ratios, by establishing a relationship between cash and other current assets to current liabilities, provide a quick measure of liquidity. A firm should ensure that it does not suffer from lack of liquidity, or excess liquidity. The failure of a company to meet its current obligations, due to lack of sufficient liquidity, will lead to technical insolvency and loss of creditor’s confidence. A very high degree of liquidity results in excess idle assets, and the consequent reduction in income.

The ratios that indicate the liquidity position of a firm are:

1. Current Ratio
2. Quick Ratio
3. Absolute Liquidity Ratio.

**a). Current Ratio:**

It is an important ratio establishing the relationship between the total current assets to current liabilities. It is also called working capital ratio, since it is relating to working of the firm. This ratio indicates how many rupees are invested in the current assets against a rupee of current liabilities.

Higher the current ratio, the larger will be the ability of the firm to meet its current obligations and the greater the safety of funds of short-term creditors.

It can be expressed as:

**Current Ratio = Current Assets**

**-----------------------**

**Current Liabilities**

The standard norm of Current Ratio is 2:1, that is, two rupees of current assets are available as security to every rupee of current liabilities is considered satisfactory.

**b). Quick Ratio or Acid-test Ratio or Liquid Ratio:**

It is applied to test the quality of the liquidity of the company. This ratio establishes a relationship between quick or liquid assets and current liabilities. The liquid or quick assets are those current assets, which are in the form of cash and near cash and can be converted into cash within a short period through the business operations without a loss of value. The term ‘short term’ is a relative period refers to the period for which the firm wants to find out the liquidity position.

It can be expressed as:

**Quick Ratio = Quick Assets**

**-------------------------**

**Current Liabilities**

**Quick Assets = Current Assets – (Closing Stock + Prepaid Expenses)**

The standard norm of Quick Ratio is 1:1.

**c). Absolute Liquidity Ratio or Super Quick Ratio:**

Is yet another liquidity ratio to indicate the ability of a firm to pay off its current liabilities immediately.

If the current ratio indicates the liquidity position of the firm for a period of one year, the acid test ratio indicates the same for a shorter period and the super quick ratio indicates the same immediately.

It indicates how many paise in a rupee of current liabilities, a firm will be able to pay if all the current liabilities fall due immediately.

It can be expressed as:

**Super Quick Ratio = Absolute Liquid Assets or Super Quick Assets**

**-------------------------------------------------------------**

**Current Liabilities**

**Absolute Liquid Assets or Super Quick Assets = Cash + Bank Balance +**

**Short-term securities.**

The standard norm of Super Quick Ratio is 0.5:1

**II. CAPITAL STRUCTURE OR LEVERAGE RATIOS:**

Capital Structure ratio is defined as the financial ratio, which focuses on the long-term solvency of the firm. The long-term solvency of the firm is always reflected in its ability to meet its long-term obligations or commitments such as payment of interest periodically without fail, repayment of principal as and when due etc.

The following are the most commonly used Capital Structure or Solvency Ratios:

1. Debt-Equity Ratio.
2. Interest-Coverage Ratio.
3. Dividend Coverage Ratio.
4. Ratio of Proprietors’ Funds to Total Assets.
   1. Ratio of Fixed Assets to Proprietors’ Funds.
   2. Ratio of Current Assets to Proprietors’ Funds.

**a). Debt-Equity Ratio:**

Debt-Equity Ratio is the ratio between outsider’s funds(debt) and insider’s funds (equity). This is used to measure the firm’s obligations to creditors in relation to the owner’s funds. It is a measure of long term solvency. The standard for this ratio is 1:1. in other words, for every rupee of debt, there should be one rupee worth internal funds.

This is also industry/sector specific ratio. Depending upon the industry, the standard for the debt-equity ratio differs. For instance, in case of capital intensive industries such as shipping or steel manufacturing companies, the D/E ratio can be as high as 20:1. so this ratio has to be interpreted considering the nature of industry and competitors D/E ratios.

A high D/E ratio implies that the creditors stake is more as compared to that of owners. In other words if the project fails financially, there is greater risk for the creditors. This may further mean that the creditors have higher degree of control in the management of the company.

On the other, a low D/E ratio is desirable which means less risk to the creditors leaving higher margin of safety for the creditors. From the firms point of view, this is also good in terms of lower commitment to pay fixed interest charges. This will deprive the company to take advantage of borrowed funds to enhance the profitability.

D/E Ratio is calculated as follows:

**Debt-Equity Ratio = Long-term Liabilities or Long-term Debt**

**----------------------------------------------------**

**Share Holders Funds**

**Long-term liabilities = Debentures and long-term loans.**

**Share Holders Funds= Equity capital + Preference Capital + All Reserves +**

**Retained Earnings etc.,**

**b). Interest Coverage Ratio:**

Interest Coverage Ratio is calculated to judge the firm’s capacity to pay the interest on debt it borrows. It gives an idea of the extent the firm’s earnings may contract before it is unable to pay interest payments out of current earnings.

It is a very important ratio for the financial institutions to judge the ability of the borrower to service the loan from the current year’s profits. The higher the ratio, better it is. In other words, a higher ratio implies that the company has no problems in paying interest.

It is calculated in the following way:

**Interest Coverage Ratio = Earnings/Profit before Interest and Tax**

**----------------------------------------------------**

**Fixed Interest Charges.**

For example if Interest Coverage Ratio = 10 times, it means that the net profit earnings are 10 times to the fixed interest charges payable during the year. The more the number of times the coverage, the safer is the investment.

**c). Dividend Coverage Ratio:**

This is another important coverage ratio indicating the number of times the dividend paid is covered by the net profit after tax

This ratio indicates how many rupees of net profit after tax is earned for every one rupee of dividend paid.

It is calculated in the following way:

**Dividend Coverage Ratio = Net Profit After Tax**

**---------------------------------------------**

**Preference or Equity Dividend paid**

**d). Ratio of Proprietors’ Funds to Total Assets:**

This establishes the relationship between proprietors’ funds and the total assets. Here, the total assets include the Tangible assets plus current assets.

As a guideline a ratio of around 0.5:1 or 50% is considered as the minimum desirable. In other words, half of the tangible assets are owned by the ordinary shareholders or owners and half by contributors of other types of share and loan capital and by creditors.

Intangible assets such as goodwill are not considered here bcoz, if the business has to be sold off forcibly, goodwill may not be of any worth.

It is calculated as follows:

**Ratio of Proprietors’ Funds to Total Assets = Proprietors Funds**

**------------------------ X 100**

**Total Assets**

**Proprietors Funds = Equity Capital + Preference Capital + All Reserve (&Funds) + Surplus(current year’s Profit).**

**Total Assets = Current Assets + Fixed Assets (only Tangible Fixed**

**Assets).**

**(i). Ratio of Fixed Assets to Proprietors’ Funds:**

This ratio explains whether the fixed assets have been bought from the Proprietors’ funds or not. By matching the long-term investment with the long-term finance, it is possible to determine whether the borrowing has been made to finance fixed assets. It is not safe to use short-term finance to buy long-term assets because when the borrowing is to be repaid, there may be a problem, as the fixed assets cannot be readily converted into cash.

The long-term sources of finance can be used for buying current assets but no short-term sources of finance can be utilized to acquire fixed assets.

This ratio shows the percentage of proprietors’ funds invested in fixed assets

Normally, for industrial establishments this can be 65% of the proprietors’ funds.

It is calculated in the following way:

**Ratio of Fixed Assets to Proprietors’ funds = Fixed Assets**

**---------------------- X 100**

**Proprietors’ Funds.**

**(ii). Ratio of Current Assets to Proprietors’ Funds:**

A higher ratio of current assets to proprietors’ funds is considered as financial strength to the firm.

It is calculated in the following way:

**Ratio of Current Assets to Proprietors’ Funds = Current Assets**

**----------------------- X 100**

**Proprietors’ Funds**

**III. PROFITABILITY RATIOS:**

A Company should earn profits to survive and grow over a period of time. Therefore, the financial manager should continuously evaluate the efficiency of the company in terms of profits. The profitability ratios are calculated to measure the operating efficiency of the company. Generally, two major types of profitability ratios are calculated:

1. Profitability Ratios in relation to Sales.
2. Profitability Ratios in relation to the Investment.

The company should be able to produce adequate profits on each rupee of sales in order to cover operating expenses and interest charges, etc., and to maximize the wealth of the owners (shareholders).

The profitability of the firm should also be evaluated in terms of the firm’s investment in assets and in terms of capital contributed by creditors and owners. If a company fails to earn a satisfactory return on investment, its survival is threatened.

**1).Profitability Ratios in relation to Sales:**

These ratios reveal the percentage of profit to the selling price or sales value. They are 3 types of ratios:

1. Gross Profit Ratio.
2. Net Profit Ratio.
3. Operating Profit Ratio.

**a). Gross Profit Ratio:**

The Gross Profit Ratio reflects the efficiency with which management produces each unit of product. A high gross profit ratio is a sign of good management. This may be due to high sales prices, lower cost of goods sold, favourable price fluctuations, etc.,

A low gross profit margin should be carefully investigated as it may reflect inefficient utilization of installed capacity, purchase of materials on unfavaurable terms or fall in the selling price.

It is calculated in the following way:

**Gross Profit Ratio = Gross Profit**

**---------------- X 100**

**Net Sales**

**Net Sales = Total Sales – Sales Returns.**

**b). Net Profit Ratio:**

The Net Profit Ratio indicates the efficiency of a firm in manufacturing, administering and selling products.

This ratio is the overall measure of the firm’s ability to turn each rupee of sales into Net Profit.

A high net profit margin indicates the firm’s ability to face market adversities like, fall in selling prices, and demand, rising cost of production etc., similarly, a low net profit margin indicates the firm’s inability to face the adversities of market.

It is calculated in the following way:

**Net Profit Margin = Net Profit**

**------------- X 100**

**Net Sales**

**c). Operating Profit Ratio:**

The above ratio indicates the amount of sales represented by the profit earned exclusively out of the business operations.

It is calculated as follows:

**Operating Profit Ratio = Operating Profit**

**--------------------- X 100**

**Net Sales.**

**Operating Profit = Sales – Operating Expenses.**

**Operating Expenses = Cost of goods sold + General and Administrative**

**Expenses + Selling and Distribution Expenses +**

**Depreciation.**

Sometimes we need to calculate Operating Expenses Ratio or Operating Ratio. It is calculated in the following way.

**Operating Ratio = Cost of goods sold + General and Administrative,**

**Selling and Distribution Expenses + Depreciation**

**---------------------------------------------------------------- X 100**

**Net Sales.**

A higher Operating Ratio is unfavourable since it will leave a small amount of operating profit or income to meet interest, dividends etc.,

**There fore Operating Profit Ratio is nothing but 100 – Operating Expenses Ratio.**

**2). Profitability ratios in relation to Investment:**

The above ratios reveal the portion of investment, that has been earned back in the form of net profit. On other words, it reveals what is the percentage of net profit to the investment made in the business. The important ratios are:

1. Return on Investment (ROI)
2. Return on Equity Share Capital (ROCE).
3. Earnings per Share (EPS).
4. Dividend per Share
5. Dividend pay-out Ratio.
6. Dividend and Earnings Yields.
7. The Price-Earnings Ratio.

**a). Return on Investment (ROI).**

Indicates the rate of return earned on the investment made in the business. Here the meaning of the term ‘Investment’ can be viewed from 3 angles. It is referred to as ‘Shareholders Equity’ or as ‘Investment in Total Assets’ or as ‘Capital Employed’.

* **Return on Shareholders Equity (ROSE) = Profit After Tax**

**--------------------------- X 100**

**Shareholders’ Equity**

**Shareholders’ Funds = Equity Capital + Preference Capital + All Reserve (&Funds)+Surplus (current year’s Profit)**

* **Return on Capital Employed (ROCE) = Profit Before Interest and Tax**

**---------------------------------------X 100**

**Capital Employed.**

**Capital Employed = Equity Capital + Preference Capital + All Reserve (&Funds) + Surplus (current year’s Profit) + Long-term**

**Liabilities.**

* **Return on Total Assets (ROTA) = Profit Before Interest and Tax**

**--------------------------------------- X 100**

**Total Assets**

**b). Return on Equity Share Capital:**

Indicates the rate of return earned on equity share capital of the company.

It is calculated in the following way:

**Return on Equity Share Capital = Net Profit after tax – Preference Dividend**

**----------------------------------------------------- X 100**

**Equity Share Capital**

**c). Earnings per Share (EPS).**

EPS is the relationship between net profits and the number of shares outstanding at the end of the given period. This can be compared with previous years to provide a basis for assessing the company’s performance.

It is calculated in the following way:

**Earnings per Share = Net Profit after Tax and Preference Dividend**

**---------------------------------------------------------- X 100**

**Number of Equity Shares.**

**d). Dividend per Share:**

Indicates the dividend paid for each equity share. Here Dividend indicates Equity Dividend.

It is calculated in the following way:

**Dividend per Share = Equity Dividend declared**

**---------------------------------**

**Number of Equity Shares**

**e). Dividend Pay-out Ratio:**

It is calculated in the following way:

**Dividend pay-out Ratio = Dividend per Share**

**-------------------------**

**Earnings per Share**

**f). Dividend Yield ratio:**

Yield refers to the amount of total return the investor will receive for a given period of time for the amount of his investment.

Dividend yield refers to the percentage return on the price paid for shares.

It is calculated as follows:

**Dividend Yield ratio = Nominal or face value of the Share**

**------------------------------------------ X % dividend per annum**

**Cost or Market price of the Share**

**Or**

**Dividend Yield ratio = Dividend per Share**

**------------------------------**

**Market value per Share**

**Earnings Yield Ratio = Earnings per Share**

**------------------------------**

**Market value per Share**

**g). The Price-Earnings Ratio:**

The reciprocal of the earnings yield or the earnings price ratio is called price-earnings ratio. It is widely used by the security analysts to evaluate the performance of a firm as expected by the investors. It indicates investors’ judgement or expectations about the firm’s performance. Management is also interested in this market appraisal of the firm’s performance and will like to find causes if the P/E ratio declines. It reflects investors’ expectations about the growth in the firm’s earnings. Industries differ in their growth prospects, accordingly, the P/E ratios for industries vary widely.

It is calculated in the following way:

**Price-Earnings Ratio = Market Value per Share**

**--------------------------------**

**Earnings per Share**

**IV: ACTIVITY OR TURNOVER RATIOS:**

Activity ratios measure how efficiently the enterprise employs the resources of assets at its command. They indicate the performance of the business. The performance of an enterprise is judged with its sales(turnover). In other words, higher sales means better performance which also indicate optimum utilization of physical resources, i.e., material, machine and man. These ratios are also referred as Turnover or Efficiency Ratios. These ratios involve relating level of activity, represented by sales or cost of goods sold with the investment in various assets.

Following are the important turnover ratios:

**1. Stock Turnover Ratio or Inventory Turnover Ratio:**

Stock turnover ratio indicates whether inventory has been efficiently used or not. The purpose is to see that only the minimum funds have been locked up in inventory. Stock turnover ratio indicates the number of times stock has been turned over during the period and evaluates the efficiency with which a firm is able to manage its inventory. In other words, it measures how many times the average stock is sold during the year. Since stock is normally shown in the books of accounts at cost, it is expressed in relation with cost of goods sold by adjusting sales with gross profits. For computation of this ratio, stock is preferably taken as average stock, representing the mean value of opening stock and closing stock.

The ratio is calculated as follows”

**Cost of goods sold**

**Stock Turnover Ratio = ---------------------------------------**

**Average stock**

**Number of days in a year**

**Stock conversion period = -------------------------------------------------**

**Stock Turnover Ratio**

**2. Debtors Turnover Ratio:**

Debtors turnover ratio, also known as Receivable turnover ratio explains the relationship of sales with the outstanding amount due from debtors to whom goods were sold on credit.

It is calculated in the following manner:

**Credit Sales**

**Debtors Turnover Ratio = -------------------------------**

**Average Debtors + Average Bills receivables**

**Credit Sales = Total Sales – Cash Sales – Sales Returns.**

If the enterprise is having difficulty in collection of dues from debtors within the credit period, it will have large amount of debtors, and a low ratio. Conversely with prompt collection of bills, the debtors balance will be low and there will be high debtors turnover ratio

**Number of days in a year**

**Debt Collection Period = --------------------------------------------**

**Debtors Turnover Ratio**

Debt collection period represents the average number of days for which a firm has to wait before its receivables are converted into cash. Generally the short collection period implies quick payment by debtors. Similarly a higher collection period implies an inefficient collection performance which adversely affects the liquidity position of the firm.

**3. Creditors Turnover Ratio:**

In the course of business operations, a firm has to make credit purchases and incur short-term liabilities. A supplier of goods, i.e.., creditor, is naturally interested in finding out how much time the firm is likely to take in repaying its creditors, this can be known by calculating creditors turnover ratio.

This ratio is calculated as:

**Credit Purchases**

**Creditors Turnover Ratio = ------------------------------------------**

**Average Creditors + Average Bills payable**

**Number of days in a year**

**Debt Payment Period = ---------------------------------------------------**

**Creditors Turnover Ratio**

. **4. Capital Turnover Ratio:**

This ratio relates sales to capital employed and is a measure of efficiency of the capital employed in the firm.

It is calculated by the following formula.

**Sales**

**Capital Turnover Ratio = ---------------------**

**Capital employed**

Capital employed is total of owner’s funds and long term debts.

A low capital turnover ratio, other things remaining the same, indicates that the enterprise is capital intensive or the assets are not properly utilized, or there exists idle assets. On the other hand, a high ratio would indicate that capital resources are being stretched to realize sales. One can test the managerial efficiency with the help of this ratio.

**5. Fixed Assets Turnover Ratio:**

The ratio of sales to fixed assets measure the turnover of fixed assets. This ratio is a measure of efficiency or use of fixed assets.

The ratio would be calculated as:

**Sales**

**Fixed Assets Turnover Ratio = ----------------------**

**Fixed Assets**

Higher turnover ratio reflects better utilization of funds deployed in fixed assets.

**6. Working Capital Turnover Ratio:**

Working capital is closely related to sales. It measures how efficiently the working capital is utilized. Net working capital is the excess of current assets over current liabilities. This ratio indicates number of times the net working capital is converted into sales. The higher ratio reflects the efficiency in the management of working capital.

It is calculated by using the following formula:

**Sales**

**Working Capital Turnover Ratio = -----------------------------**

**Net Working Capita**

**Net Working Capital = Current Assets – Current Liabilities**

1. XYZ Company limited submitted the following particulars to you:

Gross profit = 20%, stock velocity = 5 months, Debtors velocity = 3 months,

creditors velocity = 4 months, Gross profit for the year is Rs.2,50,000.

The closing stock is more than opening stock by Rs.2,00,000.

Find out ( 1 ) Sales ( 2 ) Opening stock ( 3 ) Closing stock ( 4 ) Debtors

( 5 ) Creditors.

**Solution**:

( 1 ) Finding out Sales:

Gross profit

Gross profit = ----------------- X 100 = 20% ( given in the problem)

Net Sales

If Gross profit is 20 then sales are 100

If Gross profit is 2,50,000 then sales are ?

2,50,000

------------ X 100 = 12,50,000.

20

There fore Sales = Rs.12,50,000.

( 2 ) Finding out opening stock and closing stock:

No. of Days 0r months in a year

Stock conversion period = ------------------------------------------

Stock Turnover ratio.

No. of days or months in a year.

**( or )** Stock turnover ratio = ------------------------------------------

Stock conversion period

By substituting the given values in the above formula, we get,

12 months

5 months = --------------------

Stock Turnover ratio

12 months

Stock turnover ratio = --------------- = 2.4 times

5 months

Therefore Stock turnover ratio = 2.4 times.

Cost of Goods sold

Stock Velocity ( Turnover ratio ) = --------------------------

Average Stock

Cost of goods sold

**( or )** Average stock = ------------------------

Stock turnover ratio

Sales – Gross profit = Cost of goods sold

12,50,000 – 2,50,000 = 10,00,000

Cost of goods sold = Rs.10,00,000

By substituting the available values in the above formula we get,

10,00,000

Average Stock = ------------- = 4,16,667

2.4

Average stock = Rs.4,16,667

Opening stock + Closing stock

---------------------------------------- = Average Stock

2

If opening stock is ‘ a ‘

Then closing stock is a + 2,00,000 (bcoz it is given that closing stock is more than opening stock by Rs.2,00,000)

a + ( a + 2,00,000 )

------------------------- = 4,16,667

2

2a + 2,00,000 = 4,16,667 x 2

2a + 2,00,000 = 8,33,333

2a = 8,33,333 – 2,00,000

2a = 6,33,333

a = 6,33,333

-----------

2

a = 3,16,667

‘ a ‘ is opening stock

closing stock is a + 2,00,000

closing stock = 3,16,667 + 2,00,000

closing stock = 5,16,667.

There fore Opening stock = Rs.3,16,667 and Closing stock = Rs.5,16,667 and Average stock = Rs.4,16,667.

( 3 ) Finding Debtors:

No. of days or months in a year

Debt collection period = -----------------------------------------

Debtors velocity or turnover ratio

No. of days or months in a year

**( or )** Debtors turnover ratio = -----------------------------------------

Debt collection period

12 months

Debtors turnover ratio = --------------

3 months (given in the problem)

Debtors turnover ratio or Debtors velocity = 4 times.

but

Credit Sales

Debtors Velocity ( turnover ratio ) = ----------------

Average Debtors

Credit Sales

Average debtors = **--------------------------**

Debtors turnover ratio

Entire amount of sales are assumed to be credit sales.

Substitute the available values in the above formula

12,50,000

Average debtors = -------------

4 times

Average debtors = 3,12,500

In absence of opening balance of debtors information, the calculated value will be assumed to be only closing balance of debtors or Total debtors.

There fore Debtors for the year = Rs.3,12,500

( 4 ) Finding Creditors.

Cost of goods sold = opening stock + purchases – closing stock

Purchases = cost of goods sold +closing stock – opening stock

Purchases = 10,00,000 + 5,16,667 – 3,16,667

There fore Purchases for the year are Rs.12,00,000

No. of days or months in a year

Debt payment period = -----------------------------------------

Creditors turnover ratio

No. of days or months in a year

**( or )**Creditors turnover ratio = -----------------------------------------

Debt payment period

Creditors turnover ratio = 12 months

--------------

4 months ( given in the problem)

Creditors turnover ratio = 3 times.

Credit purchases

Creditors velocity or Turnover ratio = ------------------------

Average Creditors

Credit purchases

Average creditors = ----------------------------

Creditors turnover ratio

12,00,00

Average creditors = -------------

3 times

Average creditors = 4,00,000

In absence of opening balance of creditors information, the calculated value i.e. Rs.4,00,000 will be assumed to be only closing balance of Creditors or other wise to be Total Creditors.

There fore Total Creditors = Rs.4,00,000

2) From the following particulars, calculate ( 1 ) Current Assets ( 2 ) Current Liabilities ( 3 ) Quick Assets ( 4 ) Stock.

Current Ratio = 4:1

Quick Ratio = 3.2:1

Working Capital = Rs.75,000

Solution:

Current Ratio = Current Assets

--------------------- = 4:1 (given in the problem)

Current Liabilities

If Current Liabilities are x

Then Current Assets will be 4x

But working capital = Current Assets – Current Liabilities.

75,000 = 4x – x

75,000 = 3x

x = 75,000

-------

3

x = 25,000

There fore Current liabilities = Rs.25,000

And Current Assets = 4x i.e. 4 x 25,000

Current Assets = Rs.1,00,000

Quick Assets

Quick Ratio = ------------------- = 3.2:1 (given in the problem)

Current Liabilities

If Current liabilities are x

Then Quick assets will be 3.2x

We know that x = 25,000

There fore Quick Assets = 3.2 x 25,000

Quick Assets = Rs.80,000

But Stock = Current Assets – Quick Assets ( in absence of Prepaid Expenses)

{Bcoz Quick Assets = All Current Assets – (Stock + Prepaid Expenses)}

Stock = 1,00,000 – 80,000

There fore Stock or Inventory value = Rs.20,000.

3) The following is the Balance Sheet of ABC Co.Ltd, as on 31st March, 2007. Calculate the Liquidity Ratios and comment upon the same:

| Liabilities | Amount | Assets | Amount |
| --- | --- | --- | --- |
| Equity Share Capital  Profit & Loss A/c  General Reserve  Bank Overdraft  Sundry Creditors  Bills Payables | 10,00,000  1,50,000  3,00,000  20,00,000  5,00,000  2,50,000  42,00,000 | Land & Buildings  Plant & Machinery  Stock  Sundry Debtors  Bills Receivables  Cash at Bank | 7,00,000  17,50,000  10,00,000  5,00,000  50,000  2,00,000  42,00,000 |

Solution:

Liquidity Ratios are three. 1) Current Ratio 2) Quick Ratio 3) Absolute Liquidity Ratio.

1)Finding Current Ratio.

Current Ratio = Current Assets

--------------------

Current Liabilities

Current Assets ( = Stock + Debtors + Bills Receivables (B/R) + Cash in hand + Cash at bank + Marketable securities or short term investments + Prepaid Expenses + Outstanding Incomes.

Current Liabilities = Creditors + Bills Payable (B/P) + Bank Overdraft + Outstanding Expenses + Prepaid Incomes + Provision for Taxation + Proposed Dividend + Short term loans.

As per the given details Current Ratio = Stock + Debtors + B/R + Cash at bank

------------------------------------------------

Creditors + B/P + Bank Overdraft.

10,00,000 + 5,00,000 + 50,000 + 2,00,000 17,50,000

Current Ratio = -------------------------------------------------------- = -------------- = 0.636

5,00,000 + 2,50,000 + 20,00,000 27,50,000

Therefore Current Ratio = 0.636:1

2) Finding Quick Ratio or Acid test or Liquid Ratio.

Quick Assets

Quick Ratio = -------------------

Current Liabilities

Quick Assets=All Current Assets except Closing Stock and Prepaid Expenses.i.e.

All Current Assets – (Closing Stock or Inventory – Prepaid Expenses)

Quick Assets = Debtors + B/R + Cash at Bank ( as per the given problem)

5,00,000 + 50,000 + 2,00,000 7,50,000

Quick Ratio = --------------------------------------- = ----------- = 0.2727

5,00,000 + 2,50,000 + 20,00,000 27,50,000

There fore Quick Ratio = 0.2727:1

3) Absolute Liquidity Ratio:

Absolute Liquid Assets

Absolute Liquidity ratio = ----------------------------

Current Liabilities

Absolute Liquid Assets = Cash in hand + Cash at bank + Short term investment or Marketable securities.

2,00,000 2,00,000

Absolute Liquidity Ratio = ------------------------------------------ = ------------- = 0.0727.

5,00,000 + 2,50,000 + 20,00,000 27,50,000

Therefore Absolute Liquidity Ratio = 0.0727:1

**Analysis:** The Liquidity position of the company is not satisfactory.

The Current Ratio is 0.636:1, which means it is much below than the standard ratio 2:1.

The Quick Ratio is 0.2727:1 and the standard ratio is 1:1, so quick assets position is not satisfactory and the firm need to improve their quick assets.

The Absolute Liquid Ratio is 0.0727:1 and the standard ratio is 0.5:1, which means the Absolute liquid assets are not maintained in the required level and the firm got to improve them.

4) From the following information calculate ( 1 ) Stock or Inventory turnover ratio and ( 2 ) Debtors turnover ratio.

Cash Sales = 6,00,000 ; Credit Sales = 4,50,000 ; Sales Returns = 80,000 ; Opening Stock = 42,000 ; Closing Stock = 56,000 ; Gross profit rate is 20%; Debtors at the beginning of the year = 1,00,000 and Debtors at the end of the year = 75,000.

**Solution :**

1) Finding Stock Turnover Ratio:

Cost of goods sold

Stock or Inventory Turnover Ratio = ------------------------

Average stock

Cost of goods sold = Net Sales – Gross Profit

Net Sales = Total Sales ( Cash Sales + Credit Sales ) – Sales Returns

Net Sales = 6,00,000 + 4,50,000 – 80,000 = 9,70,000

Given that Gross Profit = 20%

The above percentage will be taken up on Sales. i.e sales is taken to be100%

Gross profit = Sales x 20% = 9,70,000 x 20% = 1,94,000

Therefore Gross profit = 1,94,000

Cost of goods sold = Sales - Gross profit

9,70,000 – 1,94,000 = 7,76,000

Therefore cost of goods sold = Rs.7,76,000

Opening Stock + Closing Stock 42,000 + 56,000

Average stock = ----------------------------------------- = --------------------- = 49,000

2 2

Cost of goods sold 7,76,000

Stock Turnover Ratio = -------------------------- = ----------- = 15.83 times

Average Stock 49,000

Therefore Stock Turnover Ratio = 15.83 times.

2 ) Finding Debtors Turnover Ratio:

Net Credit Sales

Debtors Turnover Ratio = ------------------------

Average Debtors + B/R

Net Credit Sales = Total Sales – Cash Sales - Sales Returns

In the above problem Credit Sales amount is directly been given as = 4,50,000

Average Debtors = Opening Debtors + Closing Debtors / 2

1,00,000 + 75,000 1,75,000

= ------------------------ = ----------- = 87,500

2 2

4,50,000

Debtors Turnover Ratio = ----------- = 5.143 times.

87,500

Therefore Debtors Turnover Ratio = 5.143 times.

5) Equity Share Capital ( Rs. 10/- per share) Rs. 8,00,000

5% Preference Share Capital Rs. 5,40,000

10% Debenture Capital Rs. 2,00,000

Profit after tax at 60% Rs. 2,70,000

Equity Dividend 20%

Market Price of Equity Share Rs. 40

Calculate 1) Dividend Coverage on Equity Share 2) Dividend Yield Ratio 3) Earnings per share 4) Price Earnings Ratio

**Solution:**

**Net Income Statement:**

**Earnings or profit before interest and tax (EBIT or PBIT)**

**(Minus) \_\_**

**Interest ( Paid to denenture holders)**

**---------------------------------------------**

**Earnings before tax (EBT or PBT)**

**(Minus) \_\_**

**Tax (tax paid to Government)**

**---------------------------------------------**

**Earnings after tax (EAT or PAD)**

**(Minus) \_\_**

**Preference Dividend (Preference dividend paid to preference share holders)**

**--------------------------------------------**

**Net Income available to Equity Shareholders**

**1) Dividend Coverage Ratio:**

Dividend per equity share

---------------------------------- x 100

Market price per equity share

Dividend per share = 20% on Rs. 10 (face value of equity share) = Rs. 2/-

2

---- x 100 = 5%

40

Dividend Coverage Ratio = 5%.

2) Dividend Yield on Equity Share:

Net Profit after Taxes

------------------------------------------

Dividend on Preference Shares

2,70,000

-------------------------

5% on 5,40,000 (Preference dividend paid to Pref. share holders)

2,70,000

------------ = 10 times.

27,000

Dividend Yield on Equity Share = 10 times

3) Earnings Per Share:

Net Profit Available for Equity Shareholders

----------------------------------------------

Number of Equity Shares

2,70,000 – 27,000

------------------------

80,000( Rs. 8,00,000 / Rs. 10)

2,43,000

----------- = Rs. 3.04

80,000

Earnings per share = Rs. 3.04

4) Price Earnings Ratio:

Market price per Equity Share

---------------------------------------

Earnings per share

40

------ = 13.15

3.04

**Limitations of Ratios:**

The Ratio Analysis is one of the most powerful tools to analyse the financial statements. Though ratios are simple to calculate and easy to understand, they suffer from some limitations also.

**1. Limited use of a single ratio:** A single ratio, usually does not convey much of a sense. To make a better analysis, a number of ratios have to be calculated which is likely to confuse the analyst than help him in making any meaningful conclusion.

**2. Lack of Adequate Standards:** There are no well accepted standards or rules of thumb for all ratios which can be accepted as norms. Then it will be difficult for us to analyze the situation while depending on ratios.

**3. Inherent limitations of Accounting:** Like financial statements ratios also suffer from the inherent limitations of accounting records such as their historical nature, omission of errors etc.., Ratios of the past are not necessarily true indicators of the future.

**4. Change in Accounting procedure:** Change in Accounting procedure by a firm often makes ratio analysis misleading. E.g.., change in the valuation of methods of inventories from FIFO (First in first out) to LIFO (Last in first out) increases the cost of sales and reduces considerably the value of closing stocks which makes stock turnover ratio to be lucrative and an unfavourable gross profit.

**5. Window Dressing:** Financial statement can easily be window-dressed or manipulated to present a better picture of its financial and profitability position to outsiders. Hence, one has to be very careful in making a decision from ratios calculated from such financial statements. But it may be very difficult for an outsider to know about the manipulations made by the firm.

**6. Personal Bias:** Ratios are only means of financial analysis and not an end in itself. Ratios have to be interpreted and different people may interpret the same ratio in different ways.

**7. Qualitative factors cannot be considered:** Factors like Satisfaction levels, character or managerial abilities cannot be considered because ratio analysis is purely quantitative analytical tool.

**8. Other Limitations:** factors like inflation, business cycles, economic crisis, lack of uniform data, identifying the right type of ratio for analysis and interpretation are considered to be few limiting factors that weakens the utility of ratio analysis.