5th Unit

DOUBLE ENTRY SYSTEM

Introduction and Meaning:

Doubleentrysystemwasintroducedin1494byanItalianmerchant„LucaPacioli". Accordingto double entry system, every business transaction has two aspects. One aspect is receiving and the other aspect is giving. The receiving aspect is termed as "debit" and the giving aspect is termed as"credit".

When we receive something, we give something else in return also. For example, when we sell goods for cash, we receive cash and give goods in return. Thus, on any date, the total of all debits must be equal to the total of all credits, because every debit has a corresponding credit. This is known as the fundamental principle of double entry system.

- **Advantages of Double Entry System:** The following are the advantages of double entrysystem:

1. **Complete and Scientific Record:** The main advantage of the double entry system is that it helps to maintain a complete and scientific record of business transactions as both the aspects of each and every transaction are recorded init.

2. **Full Information:** Full and authentic information can be had about all transactions as the trader maintains the ledger with all types ofaccounts.

3. **Assessment of Profit or Loss:** The businessman will be able to know correctly whether he had earned profit or sustained loss.

4. **Assessment of Financial Position:** The businessman will be able to know fully about the financial position of the firm by prepare the balancesheet.

5. **Helpful in Comparison:** This system is helpful in making comparison of current year business result those of previousyears.

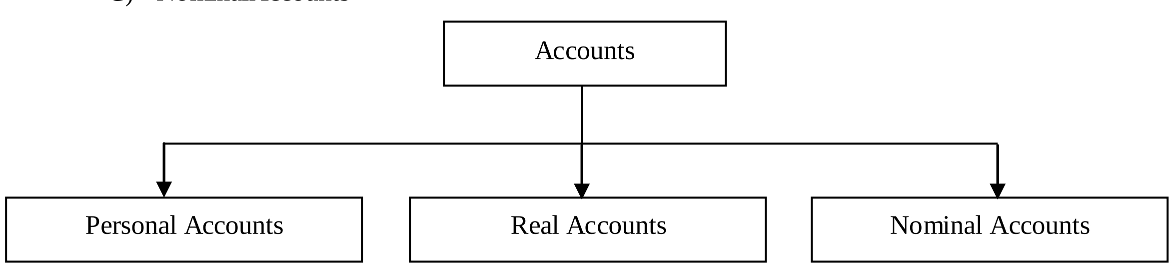
6. **Helpful in preventing Errors and Frauds:** The systematic and scientific recording of business transactions on the basis of this system minimizes the chances of errors and frauds. These can be easily detected by vouching, verification and auditing ofaccounts.

7. **To Meet Legal Requirements:** Proper maintenance of books will satisfy the tax authorities and facilitates accurate assessment. In India joint stock companies should maintain accounts under double entrysystem.

- **Classification ofAccounts:**

All the business transactions are broadly classified into three categories: (i) those relating to persons, (ii) those relating to property (assets), and (iii) those relating to income and expenses. Thus, three classes of accounts are maintained for recording all business transactions. They are:

A) PersonalAccounts
B) Real Accounts,and
C) NominalAccounts



A) Personal Accounts: Accounts relating to names of persons, firms or companies are called as „PersonalAccounts‟. Ex: Rama Account, Gopal Account, Nagarjuna Finance Limited Account, Andhra Bank Accountetc.

Debit-Credit Rule:

Debit the receiver and Credit the giver

B) Real Accounts: Accounts relating to properties or assets are known as „Real Accounts‟. Ex: Machinery Account, Furniture Accounting, Cash Accountetc.

Debit-Credit Rule:

Debit what comes in and Credit what goes out

C) Nominal Accounts: Accounts relating to expenses, losses, incomes and gains are known as „Nominal Accounts‟. Ex: Salaries Account, Commission Received Account, Interest paid Accountetc.

Debit-Credit Rule:

Debit all expenses and losses and Credit all incomes and gains

- **JOURNAL**

The word "Journal" is derived from the Latin word „Journ‟ which means a day. Therefore, journal means a **day book** where in day-to-day business transactions are recorded in chronological order (in order of dates).

Journal is treated as the book of original entry of first entry or prime entry. All the business transactions are first entered in this book before they are posted in the ledger. The process of recording a transaction in the journal is called „journalizing‟. The entries made in the books are called „journal entries‟.

Journal Proforma

Date	**Particulars**	**L.F.**	**Debit (Rs.)**	**Credit (Rs.)**
	Name of the account to be debited Name of the account to be credited (Narration or Explanation)			

1. **Date:** The year is written at the top of the date column of each page of the journal. Thereafter on the next line of the date column, the month and date of the first entry arewritten.

2. **Particulars:** The name of the account to be debited is entered on the extreme left of the particulars „column‟ and "Dr" is written at the right end. The name of the account to be credited is entered on the next line with a prefix "To". A short explanation of the transaction (i.e., narration) is given immediately below the account credited. The narration should be adequate to explain the transaction and should always appear within brackets. It always starts with the word „Being‟. At the end, a thin line is drawn to indicate that the entry of a transaction is complete from allaspects.

3. **Ledger Folio (L.F):** In this column, the page number of the ledger on which the debit and credit accounts are posted is recorded. Practically this column is not used, because the page number of ledger is not known beforehand.

4. **Debit (Rs.):** The amount to be debited is entered in thiscolumn.

5. **Credit (Rs.):** The amount to be credited is entered in thiscolumn.

- **LEDGER**

After recording a transaction in the journal, the next stage is the transfer of transactions in the respective accounts in the form of ledger.

Ledger is the principal book of accounts. It contains all the accounts of a business whether personal, real or nominal. It is also called the book of final entry.

Definition:

A ledger may be defined as "**a summary statement of all transactions relating to a person, asset, expense or income, which have taken place during a given period of time and shows their net effect.**"

Dr. ProformaofLedger Cr.

Date	Particulars	J.F	Amount (Rs.)	Date	Particulars	J.F	Amount (Rs.)
	To the name of credit account				**By** the nameofdebit account		

In ledger, each account is prepared in „**T**" shape. Each account is divided into two equal parts by a vertical line. The left hand side of the account is known as debit (Dr.) and the right hand side is known as credit (Cr.). Each of the two sides is further divided into four columns. They are: date, particulars, journal folio, and amount.

1. **Date:** This column records year, month and date oftransaction
2. **Particulars:** This column records the name of the account to be credited on the debit side and the name of the account to be debited on the credit side. The names of the account in particulars column on the debit and credit sides are preceded by words **'To'** and **'By'**.
3. **Journal Folio:** It records page number of the journal from which the posting to the ledger takesplace.
4. **Amount:** Amount columns on the Dr. and Cr. Sides of the account record the amount of each and every transaction.

Exercise: From the following transactions pass Journal entries and post them in the appropriate Ledger Accounts in the books of Avinash& Co.

2014 May 1	Startedbusinesswith	Rs.100000
May 5	Purchased goods from Rahul&Co.	Rs. 10000
May 7	Soldgoodsworth	Rs.20000
May 10	Salariespaid	Rs. 1500
May 11	PurchasedStationeryworth	Rs. 1000
May 15	Boughtfurnitureworth	Rs. 20000
May 18	Cash depositedinto bank	Rs. 9000
May 20	Painwages	Rs. 5000
May 24	Cash withdrawnfrombank	Rs. 3000
May 28	Paid rentbycheque	Rs. 1800

FINALACCOUNTS

Final accounts are prepared by an organization at the end of the financial year to know the operational efficiency and financial position of the business. Financial accounts for a trading firm refer to:

1. Trading and Profit and LossAccount
2. BalanceSheet

Trail balance is the basis for preparing of final accounts.

- **Trading Account:** This account is prepared by those concerns, which deal in the purchase and sale of goods. It is prepared to find out the amount of gross profit or gross loss in a particular period. Gross profit or gross loss is the amount of difference between the cost of goods sold and the selling price. Gross profit of loss can be ascertained with the help of the followingequations:

  Gross profit = Sales – Cost of goods sold.

  Gross loss = Cost of goods sold –Sales.

When the amount of sales is more than the cost of goods sold, the result is gross profit. If the amount of sales is less than the cost of goods sold, the result is gross loss. The gross profit or gross loss earned in this account is transformed to profit and lossaccount.

Dr. **Trading Account of ---------------- for theyearending------------** **Cr.**

Particulars		**Amount (Rs.)**	**Particulars**		**Amount (Rs.)**
To Opening stock		xxxx	By Sales	xxxx	
To Purchases	xxxx		Less: Sales returns	xx	xxxx
Less: Purchase returns	xx	xxxx	(or) return inward		
(or) return outward			By Closing stock		xxxx
Direct expenses:			By Gross loss c/d		xxxx
To Carriage inward		xxxx	(Transferred to P&L a/c)		
To Coal, Gas and Water etc		xxxx			
To Power or Motive power		xxxx			
To Octroi		xxxx			
To Import duty		xxxx			
To Custom duty		xxxx			
To Wages or wages & salaries		xxxx			
To Factory expenses		xxxx			
To Manufacturing expenses		xxxx			
To Royalty		xxxx			
To Consumable Stores		xxxx			
To Salary of foremen/works manager		xxxx			
To Gross Profit c/d					
(Transferred to P&L a/c)		xxxx			
		xxxx			xxxx

- **Profit And Loss Account:** This account is prepared to calculate the net profit of the business. The trading accounts simply depict the gross profit or gross loss made by a businessman on the sale and purchase of goods. It does not take into account the other operating or indirect expenses incurred by him during the course of running the business. Hence, the P&L account is prepared to find out the indirect amount of net profit of net loss of the firm in a particularperiod.

Dr. **P&L Account of ------------for theyearending-------** **Cr.**

Particulars		**Amount (Rs.)**	**Particulars**		**Amount (Rs.)**
To Gross loss b/d		xxxx	By Gross profit b/d		xxxx
To Administrative &			**By Income received:**		
Officeexpenses:			By Interest received		xxxx
To Rent, rates and taxes		xxxx	By Discount		xxxx
To Office salaries		xxxx	By Commission		xxxx
To Printing andstationery		xxxx	By Dividends		xxxx
To Postage and telegram		xxxx	By Income from investments		xxxx
To Heating and lighting		xxxx	By Rent from tenants		xxxx
ToInsurance		xxxx	By Apprenticeship premium		xxxx
To Auditfee		xxxx	By Insurance claims		xxxx
To Legal charges		xxxx	By Miscellaneous receipts		xxxx
To Repairs and maintenance		xxxx	By Bad debts recovered		xxxx
To General expenses		xxxx	By Net loss transferred to capital		xxxx
To Depreciation		xxxx	account c/d		
To Selling and					
distributionexpenses:					
To Advertising and publicity		xxxx			
To Salesmen"s salaries		xxxx			
To Packing expenses		xxxx			
To Bad debts		xxxx			
To Godown rent		xxxx			
To Exportexpenses		xxxx			
To Salesmen"s commission		xxxx			
To Delivery van"sexpenses		xxxx			
To Carriageoutwards		xxxx			
To Travelling expenses		xxxx			
To Agents"commission		xxxx			
ToBrokerage		xxxx			
To Provision for bad debts		xxxx			
To Financial					
expenses: To Interest on		xxxx			
capital		xxxx			
To Interest on debentures		xxxx			
To Interest on loans		xxxx			
To Discount on bills		xxxx			
To Discountallowed		xxxx			
To Bankcharges					
ToExtraordinary		xxxx			
Expenses: To Loss by fire					
(not covered by insurance)		xxxx			
To Loss on sale of fixed		xxxx			
assets		xxxx			
To Loss by theft		xxxx			
To Cash defalcations					
To Net profit transferred to					
capital account c/d.					
		xxxx			**xxxx**

- **Balance Sheet:** The third part of the final accounts is called the balance sheet. After ascertaining the net profit or net loss of the business, a trader wants to know the financial position of his business. He prepares a statement of assets and liabilities which is popularly known as the balance sheet. Balance sheet explains the financial position of business as on particulardate.

Balance sheet of --------- as on -------

Liabilities		Amount (Rs.)	Assets	Amount (Rs.)
Current Liabilities: Sundry creditors Bills payable Bank over draft Short-term loans Outstanding expenses		xxxx xxxx xxxx xxxx	**Current Assets:** Cash in hand Cash in bank Bills receivable Sundry debtors Prepaid expenses Closing stock Stock-in-trade Short-term investments	xxxxx xxxxx xxxxx xxxxx xxxxX XXX XXXX XXXX
Long-term Liabilities: Debentures Long-term loans		xxxx xxxx		
Fixed Liabilities: Capital **Add/less:** NetProfit/loss **Add:** Interest oncapital **Less:** Drawings **Less:** Income tax	xxxx xxxxx xxxx x xxx xxx	xxxx	**Fixed Assets:** Investments Land and building Plant and machinery Furniture and fittings Vehicles Goodwill Trademark Copy rights Patents	xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxx XXXX XXXX
		xxxx		
		xxxx		**xxxxx**

Adjustments:

A. Closing Stock: Closing stock is the stock of unsold at the end of the accounting year. It involves raw-materials, semi-finished goods, and finished goods. The valuation of stock is done at the cost price or the market price whichever is less.
1. Shown on the credit side of the trading account as "By Closingstock".
2. Shown as an asset in the balancesheet

B. Outstanding Expenses: Outstanding expenses are those expenses which have incurred during the accounting period but are not paid yet. Eg: Outstanding salaries, rent yet to be paid,etc.
1. Shown in the concerned account on the debit side of the trading or P&La/c.
2. Shown on the liabilities side of the balancesheet.

C. Prepaid (or Unexpired) Expenses: Prepaid expenses are those expenses, the payment of which are made in advance in the current accounting period but which relate to the next accounting period. Eg: Insurancepre-paid.
1. Deducted from those particular expenses on the debit side of the P&La/c.
2. Shown on the assets side of the balancesheet.

D. Accrued Income (or Outstanding Income): Accrued income is that which has been earned or has become due but not received till the end of an accounting period. Eg: Rent receivable, Interest receivableetc.
1. Added to the concerned account on the credit side of P&La/c.
2. Shown as an Asset in the balancesheet.

E. Income Received in Advance (or Unearned Income): Income received during an accounting period, which belongs to the next accounting period are called as income earned inadvance.
1. Deducted from the concerned income on the credit side of P&La./c
2. Shown as a liability in the balancesheet.

F. Depreciation: It is the reduction in the value of an asset due to usage, wear and tear, or obsolescence. It is anexpense.
1. Shown on the debit side of the P&La/c.
2. Deducted from the concerned asset on the assets side of the balancesheet.

G. Bad Debts: When goods are sold on credit basis, the buyer of the goods is called as "debtor". If the debtor does not pay the amount payable, such an amount is considered to be a "Baddebt".

1. Shown on debit side of P&La/c
2. Deduct the amount from sundry debtors on the assets side of balancesheet.

H. Provision for Bad and Doubtful Debts: Sometimes a businessman feels, at the end of the year, that certain debts may not be recoverable or doubtful of recovery. So he creates a provision to cover such debts, which is known as „provision for bad anddoubtful".

1. It will appear on the debit side of the P&L a/c or will be added to bad debts, and old provision for doubtful debtsat the beginning of the year will bededucted.
2. It will appear on the assets side of the balance sheet by way of deduction from sundry debtors (after deduction of further bad debts, ifany).

I. Interest on Capital: It is the interest charged by the proprietor from business on the amount invested byhim.

1. Shown on the debit side of P&La/c.
2. Added to capital in the liabilities side of the balancesheet.

J. Interest on Drawings: It is the interest charged by the business from the proprietor on the amount with drawn by the proprietor from the business for his personaluse.

1. Shown on the credit side of the P&La/c.
2. Deducted from capital in the liabilities side of the balancesheet.

Exercise: From the following Trail Balance of Surya & Sons" Co prepare Trading and P&L a/c for the year ended 31-03-2014 and a Balance Sheet as on that date:

	Debit (Rs.)	**Credit (Rs.)**
Sales		1,80,000
Purchases	1,15,000	
Sales Returns	6,000	
Purchase Returns		4,000
Opening Stock	13,000	
Freight	1,200	
Salaries	18,000	
Interest Received		830
Wages	3,250	
Office Expenses	2,650	
Discount	650	450
Rent	6,300	
Drawings	2,800	
Bills Payable		5,550
Bills Receivable	8,560	
Furniture	26,000	
Machinery	76,000	
General Expenses	1,500	
Postage & Telegrams	850	
Capital		1,01,500
Sundry Debtors	19,000	
Cash in hand	1,250	
Cash at bank	3,950	
Sundry Creditors		13,630
Total	**3,05,960**	**3,05,960**

Adjustments:

ClosingStock	Rs.27, 500
OutstandingWages	Rs.750
PrepaidRent	Rs.800

Depreciate Machinery by 10% and Furniture by 5%.
Write offbad debts Rs.1000 and provide 3% reserve for doubtfuldebts
Interest on Capital to be @10%per annum. **Ans:** GP 72,300, NP 23,840, B/s1,52,620

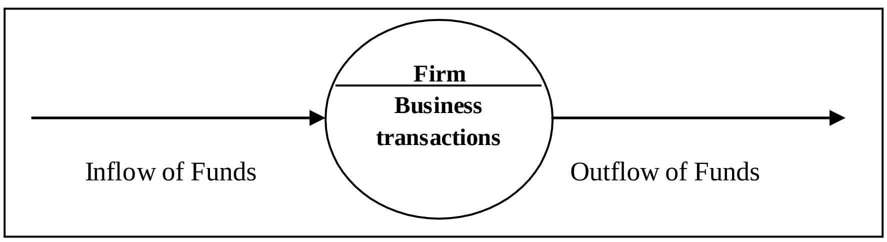
FUNDS FLOW ANALYSIS

Introduction:

In a narrow sense the term „**fund**‟ means cash only. In a broad sense the term „**fund**‟ means working capital. Working capital indicates the difference between current assets and current liabilities. The term working capital maybe:

a) Grass Working Capital – it represents total of all CurrentAssets.
b) Net Working Capital – it refers to excess of Current Assets over CurrentLiabilities.

The term „**flow**‟ means change and therefore the term „flow of funds‟ means „*change of funds*‟ or „*change in working capital*‟ in the normal course of business transactions.



Definition:

"A statement of sources (inflows) and applications (outflows) of funds is a technical device designed to analyze the changes in the financial condition of a business enterprise between two dates (accounting periods)".

--------- Foulke.

<u>Objectives / Importance of Funds Flow Statement:</u>

1. **Analysis of Financial Position:** Funds flow statement analyses how the funds were obtained and used in thepast.
2. **Evaluation of Firm's Financing:** It reveals how the firm financed its developments projects in the past i.e., from internal sources or from externalsources.
3. **An Instrument for Allocation of Resources:** The amount of funds to be available for projects shall be estimated by the financial manager with the help of funds flow statement. Based on the funds availability they can take decision tofinancing.
4. **Future Guide:** An analysis of funds flow statements of several years reveals certain valuable information for the financial manager for planning the future financial requirements of thefirm.
5. **Control Device:** The statement compared with the budgeted figures will show to what extent, the funds were utilized according to plan on this basis; the financial manager can take remedial steps if there is anydeviation.

- **Components of Flow of Funds:** In order to analyze the sources and application of funds, it is essential to know the meaning and components of flow of funds given below:

(l) Current Assets
(2) Non-Current Assets (Fixed or Permanent Assets)
(3) CurrentLiabilities
(4) Non-Current Liabilities (Capital & Long-TermLiabilities)
(5) Provision forTax
(6) Proposed Dividend

(1) Current Assets: The term "Current Assets" refer to the assets of a business of a transitory nature which are intended for resale or conversion into different form during the course of business operations. For example, raw materials are purchased and the amount unused at the end of the trading period forms part of the current as stock on hand. Materials· in process at the end of the trading period and the labour incurred in processing them also form part of currentassets.

(2) Non-Current Assets (Permanent Assets): Non-Current Assets also refer to as Permanent Assets or Fixed Assets. This class of asset includes those of tangible and intangible nature having a specific value and which are not consumed during the course of business and trade but provide the means for producing saleable goods or providing services. Land and Building, Plant and Machinery, Goodwill and Patents etc. are the few examples of Non-Current~assets.

(3) Current Liabilities: The term Current Liabilities refer to amount owing by the business which are currently due for payment. They consist of amount owing to creditors, bank loans due for repayment, proposed dividend and proposed tax for payment and expenses accrueddue.

(4) Non-Current Liabilities: The term Non-Current Liabilities refer to Capital and Long-Term Debts. It is also called as Permanent Liabilities. Any amount owing by the business which are payable over a longer period time, i.e., after a year are referred as Non-Current Liabilities. Debenture, long-term loans and loans on mortgage etc., are the few examples of non-currentliabilities.

(5) Provision for Taxation: Provision for taxation may be treated as a current liability or an appropriation of profit. When it is made during the year it is not used for adjusting the net profit, it is advisable to treat the same as current liability. Any amount of tax paid during the year is to be treated as application of funds or non-current liability. Because it is used for adjusting the net profit made during theyear.

(6) Proposed Dividend: Like provision for taxation, it is also treated as a current liability and noncurrent liability, when dividend may be considered as being declared. And thus, it will not be used for adjusting the net profit made during the year. If it is treated as an appropriation, i.e., an non-current liability when the dividend paid during theyear.

(7) Provisions Against Current Assets and Current Liabilities: Provision for bad and doubtful debts, provision for loss on inventories, provision for discount on creditors and provision made against investment etc. are made during the year, they may be treated separately as current assets or current liabilities or reduce the same from the respective gross value of the assets orliabilities.

The list of Current Accounts and Non-Current Accounts are given below:

Current Accounts

Current Liabilities	**Current Assets**
(1) BillsPayable (2) SundryCreditors (3) OutstandingExpenses (4) DividendsPayable (5) BankOverdraft (6) Short-TermLoans (7) Provisions against CurrentAssets (8) Provision for Taxation (9) Proposed Dividend (May be Current or Non-Current Liabilities)	(1)Cash in Hand (2)Cash at Bank (3)Bills Receivable (4)Sundry Debtors (5)Short-Term Investments (6)Marketable Securities (7)Stock of Raw Materials, Work-in-Progress & Finished Goods (8)PrepaidExpenses (9)AccruedIncomes

Non-Current Accounts

Non-Current or Permanent Liabilities	Non-Current or Permanent Assets
(1) Equity ShareCapital	(1) Good will
(2) Preference ShareCapital	(2) Land
(3) Debentures	(3) Building
(4) Long-TermLoans	(4) Plant andMachinery
(5) SharePremium	(5) Furniture and Fittings
(6) Shareforfeited	(6) TradeMarks
(7) Profit and Loss Account	(7) PatentRight~
(8) CapitalReserve	(8) Long-TermInvestments
(9) Capital RedemptionReserve	(9) Discount on Issue of Shares andDebentures
	(10) PreliminaryExpenses
	(11) Other DeferredExpenses

- **Preparation of Funds Flow Analysis Statements:** Funds flow analysis involves the following important three statements suchas:

    A. Funds fromOperations
    B. Statement of Changes in WorkingCapital
    C. Funds flowStatement.

A. <u>Funds from Operations:</u>The main source of fund for an enterprise is the funds from operation. A fund fromoperation means the actual amount of profit is generated by the business operations such as purchase andsales.

Statement of Funds from Operations

Particulars	Amount (Rs.)	Amount (Rs.)
Net profit or Retained earnings (Closing balance of P/L A/c as given in the balance sheet)		xxxx
Add: ***Non-fund & non-operating items which have been debited to P&L A/c:***	xxxx	
1. Depreciation on fixedassets	xxxx	
2. Goodwill written off	xxxx	
3. Patents	xxxx	
4. Trademarks	xxxx	
5. Discount on issue ofshares	xxxx	
6. Preliminary expenses writtenoff	xxxx	
7. Transfer toreserves		
8. Loss on sales of fixedassets	xxxx	xxxx
9. Proposed dividend		xxxx
Less: ***Non-fund or Non-operating items which have***	xxxx	
been credited to P&L A/c:	xxxx	
1. Profit on sale of fixedassets	xxxx	
2. Profit on revaluation ofasset		
3. Profit on redemption of shares&	xxxx	
debentures.	xxxx	
4. Rentreceived	xxxx	
5. Dividend received	xxxx	
6. Refund of incometax		
7. Net profit or retainedearnings (Opening balance of P/LA/c)		**xxxxx**
Funds from operations		
Note: If the P/L a/c shows a ***net loss***, the above procedure will be reversed.		

Alternative Specimen Format: The following is the specimen of adjusted profit and loss account to calculate fund from operations:

Adjusted Profit and Loss Account

Particulars	Amount Rs.	Particulars	Amount Rs.
To Depreciation on Fixed ASSets To Loss on Sale of Fixed Assets To Loss on Sale Investments To Goodwill written off To Discount on shares written off To Transfer to reserve To Preliminary expenses written off To Provision for Tax To Proposed Dividend To Closing Balance of P &L *Alc*	xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx **XXXX**	By Opening Balance of P &L *Alc* By Profit on Sale of Fixed Assets By Excess provision written back By Dividend received on investment By Revaluation of fixed assets By Fund From Operations (Balancing Figure)	xxxx xxxx xxxx xxxx xxxx xxxx **xxxx**

Exercise 1: From the following information of the ABC Company Ltd., calculate funds from operations:

Profit and Loss Account

Particulars	Amount Rs.	Particulars	Amount Rs.
To Expenses:		By Gross profit	230000
Operations	120000	By Gain on sale of plant	22000
Depreciation	50000		
To Loss on sale of building	12000		
To Advertisement suspense A/c	6000		
To Discount allowed to customers	1000		
To Discount on issue of shares written off	1000		
To Goodwill	15000		
To Net profit	47000		
	252000		252000

Ans: Rs. 109000

Exercise 2: From the following information of „Z" Company Ltd. On 31-03-2014, calculate „funds from operations.

1. Net profit for the yearended 31-03-2014 Rs. 700000
2. Gain on the saleofbuilding Rs.40000
3. Goodwill appears in the books Rs. 200000 out of that 10% has been written off during theyear
4. Old machinery worth Rs. 10000 has been sold for Rs. 8000 during theyear.
5. Rs.140000 have been transferred to the general reservedfund
6. Depreciation at 10% has been provided during the year on machinery cost Rs.400000.

Ans: Rs. 862000

Exercise 3: The following are the extracts from the balance sheet of the company as on 31-12-2013 and 2014. You are required to calculate "Funds from Operations".

Particulars	2013	2014
Profit and loss appropriation a/c.	30000	40000
General reserves	20000	25000
Goodwill	10000	5000
Preliminary expenses	6000	4000
Provision for depreciation on machinery	10000	12000

Ans: Rs.24000

Exercise 4: From the following balance sheet prepare funds flow statement.

Liabilities	2012	2013	Assets	2012	2013
Share capital	10000	15000	Fixed assets	10000	20000
P&L a/c	4000	6000	Current assets	13000	14500
Provision to tax	2000	3000			
Proposed dividend	1000	1500			
Sundry creditors	4000	6000			
Outstanding expenses	2000	3000			

Other information:

Tax paid duringtheyear Rs.2500
Dividendpaid Rs.1000

Ans: Rs. 7000

B. <u>Statement of Changes in Working Capital:</u>This statement is prepared from current assets and current liabilities in order to calculate the increase or decrease in working capital. This statement prepare with the help of current assets and current liabilities of twoperiods.

❖ ***Rules of Preparing Statement of Changes in WorkingCapital:***

Items	Effect on Working Capital
1. Increase in currentassets	Increase (+)
2. Decrease in currentassets	Decrease (-)
3. Increase in currentliabilities	Decrease (-)
4. Decrease in currentliabilities	Increase (+)

Proforma of Statement of Changes in Working Capital

Particulars	End of the year		Working capital changes	
	Previous Year (Rs.)	**Current Year (Rs.)**	**Increase (Rs.)**	**Decrease (Rs.)**
<u>Current Assets:</u>				
Cash in hand	---------	---------		
Cash in bank	---------	--------		
Bills receivables	--------	---------		
Sundry debtors	---------	---------		
Stock	---------	---------		
Prepaid expenses	---------	---------		
	---------	---------		

Total Current Assets (A)	**XXXX**	**XXXX**		
<u>Current Liabilities:</u>				
Bills payable	---------	---------		
Sundry creditors	--------	--------		
Outstanding expenses	--------	--------		
Bank Over Draft	--------	---------		
Short-term loans	--------	---------		
Dividends payable	---------	---------		
	---------	--------		
Total Current Liabilities (B)	**XXXX**	**XXXX**		
Net working capital (A-B)	--------	------		
Net increase/decrease in working capital	**XXXX**	**XXXX**	**XXXX**	**XXXX**

Exercise 1: From the following balance sheet of Bharat Company, prepare a schedule of working capital changes.

Ending on 31st December

	1996	**1997**
Sundry creditors	70,000	80,000
Sundry debtors	1,30,000	1,50,000
Bills receivables	10,000	8,000
Bills payables	7,000	5,000
Prepaid expenses	1,000	1,500
Outstanding expenses	5,000	6,500
Stock	1, 80,000	1, 70,000
Investment in Govt. Securities	-----	30,000

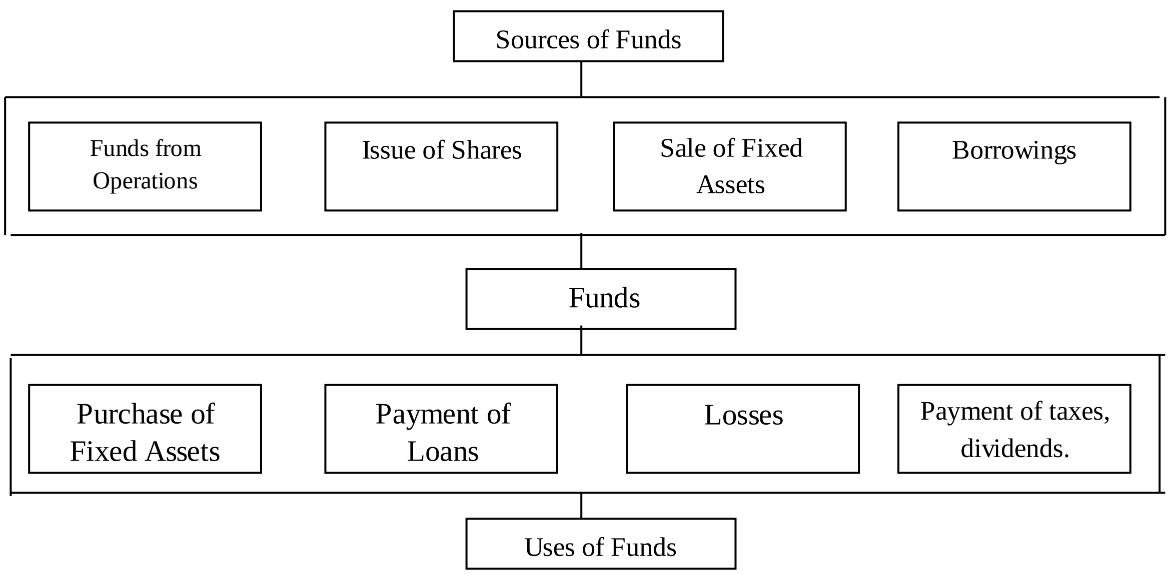
Ans: Total --- 2,68,000— 2,68,000 ---- 52,500 --- 52,500

Exercise 2: From the following balance sheet you are require to prepare a schedule of change in working capital.

Liabilities	2013	2014	Assets	2013	2014
Share capital	50000	50000	Cash	40000	45000
12% Debentures	20000	30000	Inventory	15000	10000
Sundry creditors	20000	40000	Account receivables	20000	25000
Outstanding expenses	20000	20000	Land	20000	30000
Tax payable	15000	20000	Plant	60000	70000
Retained earnings	30000	20000			
	155000	**180000**		**155000**	**180000**

Ans: 20000---20000---30000---30000

C. Funds Flow Statement: Funds flow statement is a statement which represents various sources from which funds are obtained and used to which during a particular period. The different sources and applications of fundsare:



Proforma of Funds Flow Statement: Generally, this statement is prepared in two formats. They are:

i) Reportform

ii) Accountform

Report Form of Funds-Flow Statement

Particulars	Amount (Rs.)
Sources of Funds:	
Funds from operations	xxxx
Issue of share capital	xxxx
Issue of debentures	xxxx
Long-term loans	xxxx
Sale of fixed assets	xxxx
Non-trading receipts i.e., dividends or donations	xxxx
Decrease in working capital (as per schedule)	xxxx
Total sources	**xxxx**
Applications of Funds:	
Trading Losses (If any)	
Redemption of preference share capital/ debentures	xxxx
Repayment of long-term debts	xxxx
Purchase of any fixed asset	xxxx
Non-trading payments	xxxx
Increase in working capital (as per schedule)	xxxx
Total Applications	**xxxxx**

Account Form of Funds-Flow Statement

Sources	Amount (Rs.)	Application	Amount (Rs.)
Funds from operations	xxxx	Trading Losses (If any)	xxxx
Issue of share capital	xxxx	Redemption of preference share capital/ debentures	xxxx
Issue of debentures	xxxx	Repayment of long-term debts	xxxx
Long-term loans	xxxx	Purchase of any fixed asset	xxxx
Sale of fixed assets	xxxx	Non-trading payments	xxxx
Non-trading receipts i.e., dividends or donations	xxxx	Increase in working capital (as per schedule)	xxxx
Decrease in working capital (as per schedule)	xxxx		
	xxxx		**xxxxx**

CASH FLOW STATEMENT

According to this concept, the word „fund" is used as cash only and does not include even most liquid current assets.

Definition:

"A cash flow statement explains the changes in cash position between the two periods"

Cash flow statement is a statement which indicates sources of cash inflows and transactions of cash out flows of a firm during an accounting period.

➢ **Advantages of Cash FlowStatement:**

1. **Planning and Coordination of Financial Operations:** It is useful in evaluating financial policies and current cash position. The management comes to know – how much cash is needed in the future and – at what timeneeded – how can it be arranged – how much can be generated internally – how much can be generated externally.

2. **A Control Device:** A comparison of cash flow statement of previous year with the budget for the year would indicate to what extent the resources of the firm were raised and applied according to theplan.

3. **Useful in Internal Financial Management:** Since it gives a clear picture of cash inflows from operations it is very useful to internal financial management in considering the possibility of retiring long-termdebts, in planning replacement of plant facilities or in formulating dividendpolicies.

4. **Profit and Cash Position:** It enables the management to account for situation when business has earnedhuge profits yet run without money or when it has suffered a loss and still has plenty of money at thebank.

5. **Short-run Financial Decisions:** It helps the management in taking short-term financial decisions. Suppose, iffirm wants to know its state of solvency after one month from to-date, it is possible only from cash flow analysis and not from funds flowstatement.

➢ **<u>Distinction between Funds Flow Statement and Cash FlowStatement:</u>**

Distinction between Funds Flow Statement and Cash Flow Statement

Basis	Funds Flow	Cash Flow
Subject Matter	Funds flow statement is concerned with changes in working capital positionbetween two balance sheet dates	Cash flow statement is concerned only with the changes in cash position between two balance sheet dates
Concept of Fund	It is based on a wider concept of funds i.e., working capital	It is based on the narrow concept of funds i.e., cash only, which is only one component of working capital.
Schedule of Working Capital Change	A schedule of working capital changes is prepared in the case of funds flow statement	No such schedule is prepared in the case of cash flow statement
Nature of Statement	It deals with the changes in working capital	It deals with the changes in cash position only
Opening and Closing Balance	The statement does not start with any opening of balance of any account and does not end with any such closing balance of any account	The statement starts with the opening cash and bank balances and ends with the closing cash and bank balances in most of the cases.
Difference of Sides	Difference of both sides of funds flow statement is either the increase or decrease in working capital	Difference of both the sides of cash flow statement is the closing balance of cash.
Current Liabilities	It shows the changes in the current liabilities like sundry creditors, bills payable etc.	It does not show the changes in the current liabilities of the enterprise
Utility	Fund flow is helpful in long-term planning.	Cash flow is useful in short-term planning
Period	It is prepared for longer period	It is prepared for shorter period

RATIO ANALYSIS

Introduction:

The term „Ratio" refers to the mathematical relationship between two items expressed in quantitative form. These ratios can be expressed by as i). Percentages ii) Fractions iii) Proportion of number ex: 1:4. Computing ratios, it is easy to understand the financial position of the firm.

Definition:

"Ratio is a yardstick used to evaluate the financial condition and performance of a firm, relation to two pieces of financial data to each other".

---------James C. Van Horne.

➢ **Advantages of RatioAnalysis:**

1. **Aid to measure liquidity position:** Ratios are helpful in assessing liquidity position and profitability of afirm.

2. **Long-Term Solvency:** Ratio Analysis is equally useful for assessing the long-term financial viability of a firm. The long-term solvency is measured by the leverage and profitability ratios which focus on earning power and operatingefficiency.

3. **Operating Efficiency:** Yet another dimension of the usefulness of the ratio analysis is that it throws light on the degree of efficiency of management and utilization of itsassets.

4. **Overall Profitability:** The management is constantly concerned about the overall profitability of the firm. That is, they are concerned about the ability of the firm to meet its short-term and long-term obligations to its creditors, to ensure a reasonable return to its owners and secure optimum utilization of the assets of the firm. This is possible if an integrated view is taken and all the ratios are concernedtogether.

5. **Inter-firm Comparison:** Ratio analysis not only throws light on the financial position of a firm but also serves as a stepping stone to remedial measures. This is made possible due to inter-firm comparison and comparison with industryaverages.

6. **Aid in Forecasting and Planning:** Ratio analysis helps in forecasting and planning. Over a period of time a firm develops certain norms that may indicate future success orfailure.

➢ **Limitations of RatioAnalysis:**

1. Financial ratios of a firm have meaning only when they are compared with samestandards.
2. The comparison of the ratios of two companies becomes difficult and meaningless when they are operating in different situations.
3. The financial ratios are generally calculated from the historical financial statements. The concerned parties of concernare interested in the concern"s future than its past.

➢ **Types of Ratios:**Based on their nature, the ratios can broadly be classified into fourcategories.

A. LiquidityRatios
B. TurnoverRatios
C. SolvencyRatios
D. ProfitabilityRatios

A. Liquidity Ratio:

Liquidity Ratios means the firm"s ability to meet its current obligations such as payment of taxes, wages and salaries and so on. The liquidity ratios are calculated by comparing cash and other current assets with current liabilities. Liquidity ratios can be classified into two types.

i). Current ratio: It is also known as working capital ratio. It measures the short-term debt payment ability of the firm. Current ratio is the ratio between current assets and current liabilities. The standard norm of current ratio is 2:1 and may vary from industry toindustry.

$$1.\ \text{Currunt Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

ii). Quick ratio: It also called as „acid test ratio‟ or „liquid ratio‟. Quick assets refer to all those current assets which are quickly converted into cash without a loss of value. The standard norm of current ratio is1:1.

$$2.\ \text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Quick Liabilities}}$$

Where, Quick assets = Current assets – (stock + prepaid expenses)
Quick liability= Current liability- bank overdraft.

B. <u>Activity ratio/ Efficiency ratio/ Turnoverratio</u>:

Activity ratios measure the operational efficiency of the firm. These ratios measure how efficiently the assets are employed by the firm. Some of the important turnover ratios are:

i). Inventory Turnover Ratio: it is also called as stock turnover ratio. It indicates whether investment in inventory is efficiently used ornot.

$$1.\ \text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Avg. Inventory}}\ (\text{or})\ \frac{\text{Credit Sales}}{\text{Avg. Inventory}}$$

From the inventory turnover ratio, we can determine the inventory holding period. It is determined as given below.

$$2.\ \text{Inventory Holding Period} = \frac{\text{Number of Days in a Year}}{\text{Inventory Turnover Ratio}}$$

ii). Debtors Turnover Ratio: It establishes the relationship between credit sales of the year and average receivables. It measures the number of times the receivables rotate in a year in terms of sales. It shows how quickly debtors are converted intocash.

$$3.\ \text{Debtors Turnover Ratio} = \frac{\text{Net Credit Sales}}{\text{Avg. Debtors}}$$

iii). Creditors Turnover Ratio: It is also known as accounts payable turnover ratio. It reveals the number of times the average creditors are paid during a given accounting period. In other words, it shows how promptly the firm is in a position to pay itscredits.

$$4.\ \text{Creditors Turnover Ratio} = \frac{\text{Net Credit Purchases}}{\text{Avg. Creditors}}$$

iv). Fixed Assets Turnover Ratio: It helps in assessing the contribution of investment in fixed assets in the growth ofsales.

$$5.\ \text{Fixed Assets Turnover Ratio} = \frac{\text{Net Sales}}{\text{Fixed Assets}}$$

v). Current Assets Turnover Ratio: This ratio attempts to measure the utilization and effectiveness of the use of currentassets.

$$6.\ \text{Current Assets Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Current Assets}}$$

vi). Total Asset Turnover Ratio: It reveals the relationship between total assets of the firm and sales or cost of sales.

$$7.\ \text{Total Assets Turnover Ratio} = \frac{\text{Net Sales}}{\text{Total Assets}}\ (\text{or})\ \frac{\text{Cost of Sales}}{\text{Total Assets}}$$

C. <u>Solvency Ratios/ Capital Structure Ratios/ LeverageRatios:</u>

This ratio establishes relationship between owned and borrowed capital. These ratio are reflect the firm‟s ability to periodic payment of interest and repayment of a long-term loan on maturity. The important solvency ratios are:

i). Debt-Equity Ratio: It establishes the relationship between long-term debt and shareholders‟ funds. The standard form of debt equity ratio is2:1

$$1\ \text{Debt Equity Ratio} = \frac{\text{Long-term debt}}{\text{Shareholders Fund}}\ (\text{or})\ \frac{\text{Debt}}{\text{Equity}}$$

ii). Interest Coverage Ratio: It is calculated to know the firm"s ability to pay the interest on debt itborrows.

$$2.\ \text{Interest Coverage Ratio} = \frac{\text{Profit Before Interest and Tax}}{\text{Fixed Interest Charges}}$$

iii). Equity Ratio: It is also called as proprietary ratio. It establishes the relationship between shareholders funds and total assets of thefirm.

$$3.\text{Equity Ratio or Proprietory Ratio} = \frac{\text{Shareholders Fund}}{\text{Total Assets}}\ (\text{or})\ \frac{\text{Equity}}{\text{Total Assets}}$$

iv). Solvency Ratio: It establishes the relationship between the total liabilities to outsiders and total assets of afirm.

$$4.\ \text{Solvency Ratio} = \frac{\text{Total Liabilities to Outsiders}}{\text{Total Assets}}$$

D. <u>Profitability Ratios:</u>

Profitability ratios are measure the degree of operating success of a business firm in an accounting period. The following are important profitability ratios.

i). Gross Profit Ratio: It indicates the efficiency of the production or trading operations. Gross profit reflects the efficiency with which management produces each unit ofproduct.

$$1.\ \text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}} \text{ X } 100$$

ii). Net Profit Ratio / Profit Margin Ratio: This ratio is used to measure overall profitability of thefirm.

$$2.\ \text{Net Profit Ratio/ Profit Margin Ratio} = \frac{\text{Net Profit after Taxes}}{\text{Net Sales}} \text{ X } 100$$

iii). Operating Ratio: This ratio measures the relationship between operating cost and netsales.

$$3.\ \text{Operating Ratio} = \frac{\text{Operating Cost}}{\text{Net Sales}} \text{ X } 100$$

iv). Operating Profit Ratio: This ratio measures the relationship between operating profit and netsales.

$$4.\ \text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Net Sales}} \text{ X } 100$$

v). Return on Investment Ratio: It is measure of overall profitability of the firm. It indicates the rate of return earned on the investment made in the business. The term investment refers to total assets or capital employed or shareholders funds. Therefore return on investment can be calculatedas:

$$5.\ \text{Return on Investment} = \frac{\text{Net Profit after Tax}}{\text{Shareholder's Fund}} \text{ X } 100$$

$$6.\ \text{Return on Capital Employed} = \frac{\text{Profit Before Interest and Tax}}{\text{Capital Employed}} \text{ X } 100$$

$$7.\ \text{Return on Equity} = \frac{\text{Net Profit- Preferred Dividend}}{\text{Equity Share Capital}} \text{ X } 100$$

$$8.\ \text{Return on Total Assets} = \frac{\text{Profit before Interest and Tax}}{\text{Total Assets}} \text{ X } 100$$

vi). Earnings Per Share: This ratio measures the earnings available to an equity shareholders on a per sharebasis.

$$9.\ \text{Earninp Per Share(in Rs.)} = \frac{\text{Net Profit afeter Tax and Preferred Dividend}}{\text{Number of Equity Shares}}$$

vii). Dividend-yield Ratio: It shows the rate of return to shareholders in the form of dividends based on the market price of theshare.

$$10.\ \text{Dividend Yield Ratio} = \frac{\text{Dividend Per Share}}{\text{Market Price Per Share}} \text{ X } 100$$

RATIO ANALYSIS FORMULAS

I. Liquidity Ratios:

1. $\text{Currunt Ratio} = \dfrac{\text{Current Assets}}{\text{Current Liabilities}}$ 2. $\text{Quick Ratio} = \dfrac{\text{Quick Assets}}{\text{Quick Liabilities}}$

Quick Assets = Current Assets – (Stock + Prepaid Expenses)
Quick Liabilities = Current Liabilities – Bank Overdraft.

II. Solvency Ratio/ Leverage Ratio/ Capital StructureRatio:

2. $\text{Interest Coverage Ratio} = \dfrac{\text{Profit Before Interest and Tax}}{\text{Fixed Interest Charges}}$

3. $\text{Equity Ratio or Proprietory Ratio} = \dfrac{\text{Shareholders Fund}}{\text{Total Assets}} \text{ (or) } \dfrac{\text{Equity}}{\text{Total Assets}}$

4. $\text{Solvency Ratio} = \dfrac{\text{Total Liabilities to Outsiders}}{\text{Total Assets}}$

III. Profitability Ratios:

1. $\text{Gross Profit Ratio} = \dfrac{\text{Gross Profit}}{\text{Net Sales}} \text{ X } 100$

- Gross Profit = Net Sales – Cost of Goods sold(or)
- Cost of Goods Sold = Opening Stock + Net Purchases + Manufacturing expenses – ClosingStock.
- Net Sales = Total Sales – SalesReturns
- Net Purchases = Total Purchases – Purchase Returns.

2. $\text{Net Profit Ratio/ Profit Margin Ratio} = \dfrac{\text{Net Profit after Taxes}}{\text{Net Sales}} \text{ X } 100$

3. $\text{Operating Ratio} = \dfrac{\text{Operating Cost}}{\text{Net Sales}} \text{ X } 100$

- Operating Cost= Cost of Goods Sold+ Administrative Expenses+ Selling &DistributionExpenses

4. $\text{Operating Profit Ratio} = \dfrac{\text{Operating Profit}}{\text{Net Sales}} \text{ X } 100$

- Operating Profit = Net Sales- (Cost of Goods Sold + Net OperatingExpenses)

5. $\text{Return on Investment} = \dfrac{\text{Net Profit after Tax}}{\text{Shareholder's Fund}} \text{ X } 100$

6. $\text{Return on Capital Employed} = \dfrac{\text{Profit Before Interest and Tax}}{\text{Capital Employed}} \text{ X } 100$

7. $\text{Return on Equity} = \dfrac{\text{Net Profit- Preferred Dividend}}{\text{Equity Share Capital}} \text{ X } 100$

8. $\text{Return on Total Assets} = \dfrac{\text{Profit before Interest and Tax}}{\text{Total Assets}} \text{ X } 100$

9. $\text{Earninp Per Share(in Rs.)} = \dfrac{\text{Net Profit afeter Tax and Preferred Dividend}}{\text{Number of Equity Shares}}$

10. $\text{Dividend Yield Ratio} = \dfrac{\text{Dividend Per Share}}{\text{Market Price Per Share}} \text{ X } 100$

11. $\text{Price Earning Ratio or P/E Ratio} = \dfrac{\text{Market Price Per Share}}{\text{Earnings Per Share}}$

IV. Activity Ratio/ Efficiency Ratio/ TurnoverRatio:

$$1.\ \text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Avg. Inventory}}\ (\text{or})\ \frac{\text{Credit Sales}}{\text{Avg. Inventory}}$$

$$\text{-----}\ \text{Avg. Inventory} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

$$2.\ \text{Inventory Holding Period} = \frac{\text{Number of Days in a Year}}{\text{Inventory Turnover Ratio}}$$

$$3.\ \text{Debtors Turnover Ratio/ Receivables Turnover Ratio} = \frac{\text{Net Credit Sales}}{\text{Avg. Debtors}}$$

--------Net Credit Sales = Debtors +Bills Receivables

$$\text{---------Avg. Debtors} = \frac{\text{Opening balance of Debtors} + \text{Closing balabce of Debtors}}{2}$$

$$*\ \text{Debtors Holding Period} = \frac{\text{Number of Days in a Year}}{\text{Debtors Turnover Ratio}}$$

$$4.\ \text{Creditors Turnover Ratio} = \frac{\text{Net Credit Purchases}}{\text{Avg. Creditors}}$$

---------Net Credit Purchases = Creditors + Bills Payable

$$\text{--------}\ \text{Avg. Creditors} = \frac{\text{Opening balance of Creditors} + \text{Closing balance of Creditors}}{2}$$

$$5.\ \text{Fixed Assets Turnover Ratio} = \frac{\text{Net Sales}}{\text{Fixed Assets}}$$

$$6.\ \text{Current Assets Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Current Assets}}$$

$$7.\ \text{Total Assets Turnover Ratio} = \frac{\text{Net Sales}}{\text{Total Assets}}\ (\text{or})\ \frac{\text{Cost of Sales}}{\text{Total Assets}}$$

$$8.\ \text{Working Capital Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Avg. Working Capital}}$$

STANDARDS OF RATIOS

To interpret the ratio, it is necessary to know the standard ratio. The following are the standards of ratios.

S.NO.	RATIOS	STANDARD
1	Current Ratio	2:1
2	Quick Ratio	1:1
3	Debt-Equity Ratio	2:1
4	Equity Ratio	1:3
5	Interest Coverage Ratio	6 to 7 times
6	Operating Ratio	75 to 80%
7	Fixed Assets Ratio	Less than 1:1
8	Total Assets Ratio	1:1