

BALAJI INSTITUTE OF I.T AND MANAGEMENT KADAPA

FINANCIAL ACCOUNTING FOR
MANAGERS (17E00104)

ICET CODE: BIMK

SECOND INTERNAL

ALSO DOWLOAD AT <http://www.bimkadapa.in/materials.html>



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Units covered: **Last half of 3rd 4th, & 5th Units**

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(17E00104) FINANCIAL ACCOUNTING FOR MANAGERS

The Objective of the course is to provide the basic knowledge of book keeping and accounting and enable the students to understand the Financial Statements and make analysis financial accounts of a company.

*** Standard discounting and statistical tables to be allowed in the examinations.**

1. **Introduction to Accounting:** Definition, Importance, Objectives, uses of accounting and book keeping Vs Accounting, Single entry and Double entry systems, classification of accounts – rules of debit & credit.
2. **The Accounting Process:** Overview, Books of Original Record; Journal and Subsidiary books, ledger, Trial Balance, Final accounts: Trading accounts- Profit & loss accounts- Balance sheets with adjustments, accounting principles.
3. **Valuation of Assets:** Introduction to Depreciation - Methods (Simple problems from Straight line method, Diminishing balance method and Annuity method). Inventory Valuation: **Methods of inventory valuation (Simple problems from LIFO, FIFO, Valuation of goodwill - Methods of valuation of goodwill.**
4. **Financial Analysis -I** – Analysis and interpretation of financial statements from investor and company point of view, Liquidity, leverage, solvency and profitability ratios – Du Pont Chart -A Case study on Ratio Analysis
5. **Financial Analysis-II:** Objectives of fund flow statement - Steps in preparation of fund flow statement, Objectives of Cash flow statement- Preparation of Cash flow statement - Funds flow statement Vs Cash flow statement.

Textbooks:

- Financial Accounting, Dr.S.N. Maheshwari and Dr.S.K. Maheshwari, Vikas Publishing House Pvt. Ltd.,
- Accountancy .M P Gupta & Agarwal ,S.Chand

References:

- Financial Accounting , P.C.Tulisan ,S.Chand
- Financial Accounting for Business Managers, Asish K. Bhattacharyya, PHI
- Financial Accounting Management An Analytical Perspective, Ambrish Gupta, Pearson Education
- Accounting and Financial Management, Thukaram Rao, New Age Internationals.
- Financial Accounting Reporting & Analysis, Stice & Stice, Thomson
- Accounting for Management, Vijaya Kumar, TMH
- Accounting for Managers, Made Gowda, Himalaya
- Accounting for Management , N.P.Srinivasan, & M.Shakthivel Murugan, S.Chand

UNIT-3

VALUATION OF ASSETS

3.4 INVENTORY VALUATION

Inventory or stock is the resourceful but idle assets lying with the company at the end of the accounting period. It is one of the most significant assets of a company on its balance sheet. So inventory valuation is a very important factor in the accounting of a company.

According to Kohler's Dictionary for Accountants, inventory is defined as "Raw materials and supplies, goods finished and in process of manufacture and merchandise on hand, in transit and owned, in storage or consigned to other at the end of an accounting period.

Inventory forms a significant portion of the total assets of many enterprises and a lot of working capital is invested in this item. Inventories generally constitute the second largest item after fixed assets, in the financial statements, particularly of manufacturing concerns. This is why valuation of inventories has assumed significance in recent years. The values attached to inventories can materially affect the operating results as shown by trading and profit and loss account and the financial position of a business firm because closing inventory (stock in trade) is shown on the credit side of the trading account and this amount is also shown as current asset in the balance sheet. The closing inventory becomes the opening inventory in the next accounting period and shown on the debit side of trading account. Thus, the valuation of inventories does affect the operating results not only of the current accounting period but also of the subsequent period. Inventory valuation is purely subjective depending upon the policies and the different bases of valuing inventories used by different business and even by different undertakings with in the same trade or industry.

According to Accounting Standards - A (AS - 2) 'inventories' mean tangible property held.

- (1) For sale
- (2) In the process of production for sale
- (3) For computation in the production of goods or services for sale, inventories are normally Classified in the financial statements as current assets as under:

- i. Raw materials and components
- ii. Work- in-process
- iii. Finished goods
- iv. Stores and spares.

Thus, the term inventory includes stock of (I) finished goods, (ii) work in-progress and (iii) raw materials and components. In case of a trading concern inventory primarily consists of finished goods while in case of a manufacturing concern, inventory consists of raw materials, components, stores, work-in-process and finished goods.

3.4.1 OBJECTIVE OF INVENTORY VALUATION:

- 1. Determination of income:** The valuation of inventory is necessary for determining the net income earned by a business during a particular period. Gross profit is the excess of sales over cost of goods sold. Cost of goods sold is ascertained by adding opening inventory to and deducting closing inventory from purchases.
- 2. Determination of financial position:** The inventory at the end of a period is to be shown as a current asset in the balance sheet of the business. In case the inventory is not properly valued; the balance sheet will not disclose the correct financial position of the business.
- 3. Income Determination:** To calculate accurate profit or loss for a certain period, it is necessary to value inventory properly. Profit is the excess of sales over cost of sales. Cost of Sales is equal to Opening stock plus Purchases plus Direct Expenses minus closing stock. Hence, if stock is not valued correctly, profit will not be accurate.
- 4. Presentation of Financial Position:** At the end of the accounting period, position of various assets and liabilities is presented in the Balance Sheet. Inventory is one of the items of assets shown in Balance Sheet. If inventory is not valued properly, correct financial position of the business will not be reflected in Balance Sheet.
- 5. Location of Wastage:** Proper maintenance of inventory records helps a business firm to locate deficiencies, wastages, pilferages etc. Periodical checking of inventory records will enable the business to ascertain any difference between actual physical stock and stock as per books.
- 6. Liquidity Position:** As inventory is classified as current asset, it is one of the constituents of net working capital which reveals the liquidity position of a business. Current ratio which reveals the relationship between current assets and current liabilities is significantly affected by value of inventory.

3.4.2 METHODS OF VALUATION OF INVENTORIES: The purchase prices of materials fluctuate on account of changes in the product prices, buying from different suppliers and on account of quality discounts. Because of price fluctuations, the stock may

include several lots of the same material purchased at different prices. When these materials are issued to production, it is important to consider the correct price at which these materials are charged to production. There are various methods in use. They are broadly classified under the following categories:

3.4.2.1. First in First out (Commonly Called FIFO): Under this method material is first issued from the earliest consignment on hand and priced at the cost at which that consignment was placed in the stores. In other words, materials received first are issued first. The units in the opening stock of materials are treated as if they are issued first, the units from the first purchase issued next, and so on until the units left in the closing stock of materials are valued at the latest cost of purchases. It follows that unit costs are apportioned to cost of production according to their chronological order of receipts in the store.

This method is most suitable in times of falling prices because the issue price of materials to jobs or works orders will be high (materials issued from the earliest consignments which were purchased at a higher rate) while the cost of replacement of materials will be low. But in case of rising prices this method is not suitable because the issue price of materials to production will be low while the cost of replacement of materials will be high.

3.4.2.1.1 Advantages of FIFO Method:

1. The main advantage of FIFO method is that it is simple to understand and easy to operate.
2. It is a logical method because it takes into consideration the normal procedure of utilizing first those materials which are received first. Materials are issued in order of purchases, so materials received first are utilized first.
3. Under this method, materials are issued at the purchase price; so the cost of jobs or work orders is correctly ascertained so far as cost of materials is concerned. Thus, the method recovers the cost price of the materials.
4. This method is useful when prices are falling.
5. Closing stock of materials will be valued at the market price as the closing stock under this method would consist of recent purchase of materials.
6. This method is also useful when transactions are not too many and prices of materials are fairly steady.

3.4.2.1.2 Disadvantages of FIFO Method:

1. This method increases the possibility of clerical errors, if consignments are received frequently at fluctuating prices as every time an issue of materials is made, the store ledger clerk will have to go through this record to ascertain the price to be charged.
2. In case of fluctuations in prices of materials, comparison between one job and the other job becomes difficult because one job started a few minutes later than another of the same nature may be issued materials at different prices, merely because the earlier job exhausted the supply of the lower priced materials in stock.
3. For pricing one requisition more than one price has often to be taken.
4. When prices rise, the issue price does not reflect the market price as materials are issued from the earliest consignments. Therefore, the charge to production is low because the cost of replacing the material consumed will be higher than the price of issue.

3.4.2.2. Last In First Out (Commonly Called LIFO) Method:-

As against the First In First Out method the issues under this method are priced in the reverse order of purchase i.e., the price of the latest available consignment is taken. This method is sometimes known as the replacement cost method because materials are issued at the current cost to jobs or work orders except when purchases were made long ago. This method is suitable in times of rising prices because material will be issued from the latest consignment at a price which is closely related to the current price levels. Valuing material issues at the price of the latest available consignment will help the management in fixing the competitive selling prices of the products. This method was first introduced in the U.S.A. during the Second World War to get the advantages of rising prices.

3.4.2.2.1 Advantages of LIFO Method:

1. Like FIFO method, this is simple to operate and is useful when transactions are not too many and the prices are fairly steady.
2. Like FIFO, this method recovers cost from production because actual cost of material is charged to production.
3. Production is charged at the recent prices because materials are issued from the latest consignment. Thus, effect of current market prices of materials is reflected in the cost of sales provided the materials are recently purchased.

4. In times of rising prices, LIFO method of pricing issues is suitable because materials are issued at the current market prices which are high. This method thus helps in showing a lower profit because of increased charge to production during periods of rising prices and lower profit reduces burden of income-tax.

3.4.2.3 Disadvantages of LIFO Method:

1. Like FIFO, this method may lead to clerical errors as every time an issue is made, the store ledger clerk will have to go through the record to ascertain the price to be charged.
2. Like FIFO, comparison between one job and the other job will become difficult because one job started a few minutes after another of the same type may bear a different charge for materials consumed, merely because the earlier job exhausted the supply of the lower priced or higher priced materials in stock.
3. For pricing a single requisition, more than one price has often to be adopted. The stock in hand is valued at price which does not reflect current market price. Consequently, closing stock will be understated or overstated in the Balance Sheet.

3.4.2.4. Highest In First Out (HIFO) Method:

This method is based on the assumption that the closing stock of materials should always remain at the minimum value; so the issues are priced at the highest value of the available consignments in the store. The method is not popular as it always undervalues the stock which amounts to creating a secret reserve. The method is mainly used in case of cost plus contracts or monopoly products as it is helpful in increasing the price of the contract or products.

Example 17: From the following transactions prepare a Stores Ledger Account, showing pricing of materials on LIFO basis.

| Year 2014 | | | | | |
|-----------|---------------|-----|-----|--|----------------------|
| 1 July | Opening stock | | | | 500 units @ ₹20 each |
| 4 July | Purchased | GRN | 574 | | 400 units @ ₹21 each |
| 6 July | Issued | SR | 251 | | 600 units |
| 8 July | Purchased | GRN | 578 | | 800 units @ ₹24 each |
| 9 July | Issued | SR | 258 | | 500 units |
| 13 July | Issued | SR | 262 | | 300 units |
| 24 July | Purchased | GRN | 584 | | 500 units @ ₹25 each |
| 28 July | Issued | SR | 269 | | 400 units |

GRN = Goods Received Notes

SR = Stores Requisition

Solution:

**LIFO Method
Stores Ledger Account**

| Date | Receipts | | | | Issues | | | | Balance | | |
|----------------|----------|------------|----------|------------|---------|------------|----------|----------------|------------|----------|-----------------|
| | Ref. GRN | Qty. Units | Rate (₹) | Amount (₹) | Ref. SR | Qty. Units | Rate (₹) | Amount (₹) | Qty. Units | Rate (₹) | Amount (₹) |
| 2014 1 July | - | - | - | - | - | - | - | - | 500 | 20 | 10,000 |
| 4 July | 574 | 400 | 21 | 8,400 | - | - | - | - | 500 400 | 20 21 | 10,000 8,400 |
| 6 July | - | - | - | - | 251 | 400 200 | 21 20 | 8,400 4,000 | | | |
| 8 July | 578 | 800 | 24 | 19,200 | - | - | - | - | 300 800 | 20 24 | 6,000 19,200 |
| 9 July | - | - | - | - | 258 | 500 | 24 | 12,000 | 300 300 | 20 24 | 6,000 7,200 |
| 13 July | - | - | - | - | 262 | 300 | 24 | 7,200 | 300 | 20 | 6,000 |
| 24 July | 584 | 500 | 25 | 12,500 | - | - | - | - | 300 500 | 20 25 | 6,000 12,500 |
| 28 July | - | - | - | - | 269 | 400 | 25 | 10,000 | 300 100 | 20 25 | 6,000 2,500 |

Example 18: XYZ Inc. had the following inventory balance as of June 30, 2014.

| | |
|--|----------|
| June 3 order of 400 units @ Rs. 10.50 | ₹4,200 |
| June 8 order of 100 units @ Rs. 11.00 | 1,100 |
| June 19 order of 200 units @ Rs. 11.50 | 2,300 |
| | ₹. 7,600 |

On July 1, 2014, the company sold 240 units at ₹16.00 per unit. On July 10, 2014, a competitor announced a new model which resulted in the cost of Murray inventory dropping to the new replacement cost, which was ₹10.75. XYZ Inc. uses a perpetual inventory system.

What is the balance in the inventory account on July 9, 2014, if XYZ Inc. uses:

- 1) FIFO
- 2) LIFO

Solution:

FIFO Method
Stores Ledger Account

| Date | Receipts | | | Issues | | | Balance | | |
|---------------|------------------|----------|------------|------------------|----------|------------|---------------------|----------|--------------|
| | Quantity (Units) | Rate (₹) | Amount (₹) | Quantity (Units) | Rate (₹) | Amount (₹) | Quantity (Units) | Rate (₹) | Amount (₹) |
| June 3, 2014 | 400 | 10.50 | 4,200 | — | — | — | 400 | 10.50 | 4,200 |
| June 8, 2014 | 100 | 11 | 1,100 | — | — | — | { 400 100 | 10.50 | 4,200 |
| | | | | | | | | 11 | 1,100 |
| June 19, 2014 | 200 | 11.50 | 2,300 | — | — | — | { 400 100 200 | 10.50 | 4,200 |
| | | | | | | | | 11 | 1,100 |
| | | | | | | | | 11.50 | 2,300 |
| July 1, 2014 | — | — | — | 240 | 10.50 | 2,520 | { 160 100 200 | 10.50 | 1,680 |
| | | | | | | | | 11 | 1,100 |
| | | | | | | | | 11.50 | 2,300 |
| July 9, 2014 | — | — | — | — | — | — | 460 | — | 5,080 |

Notes:

- 1) Value of Inventory on July 9, 2014 is ₹5,080 and in unit 460
- 2) Cost of goods sold = ₹2,520
- 3) Profit = Sales - Cost of goods sold
= 3,840 - 2,520 = ₹1,320

LIFO Method
Stores Ledger Account

| Date | Receipts | | | Issues | | | Balance | | |
|---------------|------------------|----------|------------|------------------|----------|------------|---------------------|----------|--------------|
| | Quantity (Units) | Rate (₹) | Amount (₹) | Quantity (Units) | Rate (₹) | Amount (₹) | Quantity (Units) | Rate (₹) | Amount (₹) |
| June 3, 2014 | 400 | 10.50 | 4,200 | — | — | — | 400 | 10.50 | 4,200 |
| June 8, 2014 | 100 | 11 | 1,100 | — | — | — | { 400 100 | 10.50 | 4,200 |
| | | | | | | | | 11 | 1,100 |
| June 19, 2014 | 200 | 11.50 | 2,300 | — | — | — | { 400 100 200 | 10.50 | 4,200 |
| | | | | | | | | 11 | 1,100 |
| | | | | | | | | 11.50 | 2,300 |
| July 1, 2014 | — | — | — | { 200 40 | 11.50 | 2,300 | { 400 60 | 10.50 | 4,200 |
| | | | | | 11 | 440 | | 11 | 660 |
| July 9, 2014 | — | — | — | — | — | — | 460 | — | 4,860 |

Notes:

- 1) Value of Inventory on July 9, 2014 is ₹4,860 and in unit 460
- 2) Cost of goods sold = ₹2,740 (2,300+440)
- 3) Profit = Sales - Cost of goods sold = 3,840 - 2,740 = ₹1,100

3.4.2.5 Average Cost Method:

The principle on which the average cost method is based is that all of the materials in store are so mixed up that an issue cannot be made from any particular lot of purchases and, therefore, it is proper if the materials are issued at the average cost of materials in store.

Average may be of two types:

- (i) Simple Arithmetic Average
- (ii) Weighted Arithmetic Average.

3.4.2.5.1 Simple Arithmetic Average: "A price which is calculated by dividing the total of the prices of the materials in the stock from which the material to be priced could be drawn by the number of the prices used in that total".

Simple average price is calculated by dividing the total of unit purchase prices of different lots in stock on the date of issue by the number of prices used in the calculation and quantity of different lots is ignored. This method may lead to over-recovery or under-recovery of cost of materials from production because quantity purchased in each lot is ignored.

Simple average price is not to be followed because this method of calculating issue price does not recover the cost price of the materials from the production.

3.4.2.5.2 Weighted Average Price: "A price which is calculated by dividing the total cost of materials in the stock from which the materials to be priced could be drawn by the total quantity of materials in that stock".

It is better to issue the material at weighted average price method because it recovers the cost price of the materials from production.

Example 20: From the following information, prepare a Stores Ledger adopting simple average price method:

| | | |
|----------|----|---|
| November | 1 | Opening stock 500 units @ ₹. 2/unit |
| | 2 | Purchased 400 units @ ₹2.10/unit |
| | 5 | Issued 600 units |
| | 7 | Purchased 800 units @ ₹. 2.40/unit |
| | 9 | Issued 500 units |
| | 12 | Returned 200 units from 5 th issue |
| | 17 | Purchased 400 units @ 2.50/unit |
| | 25 | Issued 600 units |

Solution:

Store Ledger Account

| Date | Receipts | | | Issues | | | Balance | | | |
|------|----------|------------|----------|------------|------------|----------|------------|------------|----------|------------|
| | Nov. | Qty. Units | Rate (₹) | Amount (₹) | Qty. Units | Rate (₹) | Amount (₹) | Qty. Units | Rate (₹) | Amount (₹) |
| 1 | - | - | - | - | - | - | - | 500 | 2.00 | 1,000 |
| 2 | | 400 | 2.10 | 840 | - | - | - | 500 | | 1,000 |
| | | | | | | | | 400 | | 840 |
| 5 | | - | - | - | 600 | 2.05 | 1230 | 300 | | 610 |
| 7 | | 800 | 2.40 | 1920 | - | - | - | 300 | | 610 |
| | | | | | | | | 800 | | 1,920 |
| 9 | | - | - | - | 500 | 2.25 | 1125 | 600 | | 1,405 |
| 12 | | 200 | 2.05 | 410 | - | - | - | 600 | | 1,405 |
| | | | | | | | | 200 | | 410 |
| 17 | | 400 | 2.50 | 1000 | - | - | - | 600 | | 1,405 |
| | | | | | | | | 200 | | 410 |
| | | | | | | | | 400 | | 1,000 |
| 25 | | - | - | - | 600 | 2.31 | 1386 | 600 | | 1,429 |

$$\text{Issue Price} = (1) \text{ 5 Nov.} = \frac{2.00 + 2.10}{2} = 2.05$$

$$(2) \text{ 9 Nov.} = \frac{2.10 + 2.40}{2} = 2.25$$

$$(3) \text{ 25 NOV.} = \frac{2.40 + 2.05 + 2.50}{3} = 2.31$$

- 2) **Weighted Average Price Method (WAPM):** It is based on the assumption that each issue of goods consists of a due proportion of the earlier lots. It uses a weighted average price for pricing the issue of materials until a new lot is purchased when a new weighted average price will be calculated.

Weighted Average Price is calculated as follows:

$$\text{Weighted Average Price} = \frac{\text{Total Cost of Materials in stock}}{\text{Total Quantity of Materials in stock}}$$

It is useful when the quantity of materials in each lot purchased is not uniform.

- i) **Periodic Weighted Average Method (PWAM):** In this method, the weighted average price is calculated at the end of each period, say, a month, by dividing the total cost of purchases during the period by the quantity purchased., i.e.,

$$\text{Periodic weighted average price} = \frac{\text{Total cost of materials purchased during the period}}{\text{Total quantity purchased during the period}}$$

- ii) **Moving Weighted Average Method:** In this method, the price is calculated by dividing the total of the periodic weighted average prices of a given number of periods by the number of periods. This method gives more accurate results as it considers quantity as well as prices for arriving at weighted average. The advantages and disadvantages are similar to those of simple average price method.

Example 21: From the following transaction pertaining to material. 'C' prepare stores ledger account using Weighted average method of Pricing materials.

| Date | Unit Purchased | Cost Price per kg |
|----------------|----------------|-------------------|
| 2014 January 2 | 200 | 102 |
| 7 | 300 | 105 |
| 10 | 200 | 108 |
| 20 | 100 | 110 |

There were 100kg in stock on January 1, 2014 which were valued at Rs. 100 per kg Quantities issued from stores during the month were 200kg January 5 – 250kg, January 13 – 200kg, January 18 – 200kg January 25 – 150kg.

Solution:

| Stores Ledger | | | | | | | | | |
|---------------|------------|----------|------------|------------|----------|------------|------------|----------|------------|
| Date | | Receipts | | Issues | | | Balance | | |
| 2014 | Qty. Units | Rate (₹) | Amount (₹) | Qty. Units | Rate (₹) | Amount (₹) | Qty. Units | Rate (₹) | Amount (₹) |
| 1 Jan | | | | | | | 100 | 100 | 10,000 |
| 2 Jan | 200 | 102 | 20,400 | – | – | – | 300 | 101.33 | 30,400 |
| 5 Jan | | | | 250 | 101.33 | 25,333 | 50 | 101.33 | 5,067 |
| 7 Jan | 300 | 105 | 31,500 | | | | 350 | 104.48 | 36,567 |
| 10 Jan | 200 | 108 | 21,600 | | | | 550 | 105.75 | 58,167 |
| 13 Jan | | | | 200 | 105.76 | 21,152 | 350 | 105.75 | 37,015 |
| 18 Jan | | | | 200 | 105.76 | 21,152 | 150 | 105.75 | 15,863 |
| 20 Jan | 100 | 110 | 11,000 | | | | 250 | 107.45 | 26,863 |
| 25 Jan | | | | 150 | 107.45 | 16,117.8 | 100 | 107.45 | 10,745 |

Example 22: From the following transactions, prepare a stores ledger account, showing pricing of materials on LIFO basis:

| Year 2014 | | | | | |
|-----------|---------------|-----|-----|--|----------------------|
| 1 July | Opening stock | | | | 500 units @ ₹20 each |
| 4 July | Purchased | GRN | 574 | | 400 units @ ₹21 each |
| 6 July | Issued | SR | 251 | | 600 units |
| 8 July | Purchased | GRN | 578 | | 800 units @ ₹24 each |
| 9 July | Issued | SR | 258 | | 500 units |
| 13 July | Issued | SR | 262 | | 300 units |
| 24 July | Purchased | GRN | 584 | | 500 units @ ₹25 each |
| 28 July | Issued | SR | 269 | | 400 units |

Solution:

| Weighted Average Method Stores Ledger Account | | | | | | | | | | | |
|--|----------|------------|----------|------------|---------|------------|----------|------------|------------|----------|------------|
| Date 2014 | Receipts | | | | Issues | | | | Balance | | |
| | Ref. GRN | Qty. Units | Rate (₹) | Amount (₹) | Ref. SR | Qty. Units | Rate (₹) | Amount (₹) | Qty. Units | Rate (₹) | Amount (₹) |
| 1 July | – | – | – | – | – | – | – | – | 500 | 20.000 | 10,000 |
| 4 July | 574 | 400 | 21 | 8,400 | – | – | – | – | 900 | 20.444 | 18,400 |
| 6 July | – | – | – | – | 251 | 600 | 20.444 | 12,267 | 300 | 20.444 | 6,133 |
| 8 July | 578 | 800 | 24 | 19,200 | | | | | 1,100 | 23.030 | 25,333 |
| 9 July | – | – | – | – | 258 | 500 | 23.030 | 11,515 | 600 | 23.030 | 13,818 |
| 13 July | – | – | – | – | 262 | 300 | 23.030 | 6,909 | 300 | 23.030 | 6,909 |
| 24 July | 584 | 500 | 25 | 12,500 | – | – | – | – | 800 | 24.261 | 19,409 |
| 28 July | – | – | – | – | 269 | 400 | 24.261 | 9,705 | 400 | 24.261 | 9,704 |

Note: The issue prices are calculated as follows:

On 4 July ₹18,400 ÷ 900 units = 20.444

On 8 July ₹25,333 ÷ 1,100 units = 23.030

On 24 July ₹19,409 ÷ 800 units = 24.261

the following information, prepare a Stores Ledger under (a) Simple Average (b) Weighted Average Method.

| Date | Units | Price |
|-------------------|-------|-------|
| Receipts : | | |
| | | ₹ |
| 2.3.11 | 200 | 2.00 |
| 10.3.11 | 300 | 2.40 |
| 18.3.11 | 250 | 2.60 |
| Issues : | | |
| 15.3.11 | 250 | |
| 20.3.11 | 300 | |

(a) Simple Average Method

| Date | Receipts | | | Issues | | | Balance | |
|----------|----------|-----------|------------|----------|-----------|------------|----------|------------|
| | Quantity | Unit cost | Total cost | Quantity | Unit cost | Total cost | Quantity | Total cost |
| | | ₹ | ₹ | | ₹ | ₹ | | ₹ |
| March 2 | 200 | 2.00 | 400 | — | — | — | 200 | 400 |
| March 10 | 300 | 2.40 | 720 | — | — | — | 500 | 1,120 |
| March 15 | — | — | — | 250 | 2.20 | 550 | 250 | 570 |
| March 18 | 250 | 2.60 | 650 | — | — | — | 500 | 1,220 |
| March 20 | — | — | — | 300 | 2.50 | 750 | 200 | 470 |

March 15th : Issue price : $(2 + 2.40)/2 = ₹ 2.20$

March 20th Issue price : $(2.40 + 2.60)/2 = ₹ 2.50$

b) Weighted Average Method

| Date | Receipts | | | Issues | | | Balance | | |
|----------|----------|-----------|------------|----------|-----------|------------|----------|-----------|------------|
| | Quantity | Unit cost | Total cost | Quantity | Unit cost | Total cost | Quantity | Unit cost | Total cost |
| | | ₹ | ₹ | | ₹ | ₹ | | ₹ | ₹ |
| March 2 | 200 | 2.00 | 400 | — | — | — | 200 | 2.00 | 400 |
| March 10 | 300 | 2.40 | 720 | — | — | — | 500 | 2.24 | 1,120 |
| March 15 | — | — | — | 250 | 2.24 | 560 | 250 | 2.24 | 560 |
| March 18 | 250 | 2.60 | 650 | — | — | — | 500 | 2.42 | 1,210 |
| March 20 | — | — | — | 300 | 2.42 | 726 | 200 | 2.42 | 484 |

4. VALUATION OF GOODWILL

Goodwill is an intangible asset but not fictitious. Although it is not tangible asset like plant and machinery, buildings etc., nevertheless it contributes to the profit earnings capacity of the business. Goodwill is valuable asset if the business concern is profitable, but if the business is suffering from continuous losses, it is valueless.

Goodwill is defined as an element arising in which enables it to earn greater profits than the return normally to be expected in the capital represented by the net tangible assets employed in the business.

According to Kohler "goodwill is the current value of expected future income in excess of a normal return on investment in net tangible assets."

It is treated as an intangible asset in accounts. It is sometimes described as a momentum or a push that keeps the business going without further effort like the momentum of a body that continues its motion against a retarding force till it comes to rest gradually.

4.1 Features of Goodwill:

- a.** Goodwill is incapable of realization separately from business as a whole i.e., goodwill is realizable only if the business is disposed.
- b.** Value of goodwill has no relationship to any costs which might have been incurred to build it.
- c.** The value of goodwill may be positive or negative. It is positive when the value of business is more than the value of its net separable assets and negative when the value of business is less than the value of its net separable assets.
- d.** The value of goodwill fluctuates from time to time due to internal and external factors.
- e.** It is not possible to value separately each of the intangible factors contributing to goodwill.
- f.** Assessment of the value of goodwill is highly subjective and differs from value to value.
- g.** Goodwill may be inherent or purchased goodwill. Inherent goodwill is internally generated. It is not shown in financial statement. It is not included in purchased ' consideration and its valuation depend on the subjective judgment of the value.

4.2 Under What Circumstances Goodwill Is Valued and Recorded (or) Need for Valuation of Goodwill:

The need for valuation of goodwill depends upon the form of business organization. In case of sole trading concern it is usually valued at the time of selling the business. In case of Partnership concerns, the necessity arises in the following cases.

- a. When a new partner is admitted
- b. When a partner retires or dies
- c. When- there is a change in profit sharing ratio among the partners
- d. When the firm sells its business to a company

In case of Joint Stock Company it is valued

- a. When two or more companies amalgamate.
- b. When one company takes over another company
- c. When a company wants to acquire controlling interest in other company and
- d. When government takes over the business.

4.3. Factors affecting valuation of goodwill:

The main factors affecting the goodwill are:

- a. Profits expected to be earned by the concern. Profitability of a concern depends upon several factors such as nature of business, favorable location or site, skill of management, possession of trademarks, patents and copy rights, future competition, money market conditions etc.,
- b. Capital requirement
- c. Possibility of transfer of goodwill etc.,

5. METHODS OF VALUATION OF GOODWILL

The various methods of valuation of Goodwill are

1. Average profit method
2. Weight average profit method
3. Super profit method
4. Capitalization method

5.1 Average Profit Method: In this method the value of goodwill is calculated on the basis of average for the past few years multiplied by the no. of years in which anticipated profit will be available.

$$\text{Average Profit} = \frac{\text{Total Profits}}{\text{No. of years}}$$

Example: From the following information calculate Goodwill.

| Years | Profit |
|-------|--------|
| 1995 | 10,000 |
| 1996 | 16,000 |
| 1997 | 12,000 |
| 1998 | 16,000 |
| 1999 | 5,000 |

Goodwill is 2 years of purchase.

Solution:-

Calculating Goodwill

$$\begin{aligned} \text{Average Profit} &= \text{Total of Profits/ No. of years} \\ &= 59,000/5 = 11,800 \end{aligned}$$

$$\text{Average Profit} = 11800 \times 2 \text{ years purchase}$$

$$\text{Goodwill} = 23,600.$$

5.2 Weighted Average Profit Method: In this method Goodwill is calculated by weights.

If weights are not given assume weights

Ex: 1year, weight =1,2 year weight = 2, 3 year weight = 3

This method is used when profits are continuously increased or continuously decreased.

$$\text{Weighted Avg. Profit} = \frac{\text{Total amount of weights}}{\text{Total no. of weights}}$$

Example: From the following information calculate Goodwill Amount

| Years | Profit |
|-------|--------|
| 1985 | 6,000 |
| 1986 | 9,000 |
| 1987 | 10,000 |
| 1988 | 12,000 |
| 1989 | 15,000 |

Goodwill is 3 years of purchase.

Solution:-

$$\text{Weighted Avg. Profit} = \frac{\text{Total amount of weights}}{\text{Total No. of weights}}$$

| Year | Profit | Weights | Amount of Weight |
|------|--------|---------|------------------|
| 1985 | 6000 | 1 | 6,000 |
| 1986 | 9000 | 2 | 18,000 |
| 1987 | 10000 | 3 | 30,000 |
| 1988 | 12000 | 4 | 48,000 |
| 1989 | 15000 | 5 | 75,000 |
| | | | 1,77,000 |

Weighted Average Profit = $1,77,000/15=11,800$

Good Will:-

G.W. = Weighted Average Profit x 3 year purchase

G.W. = $11,800 \times 3 = 35,400$.

5.3 Super Profit Method : In this method the future maintainable profits of the firm whose goodwill is for sale are compared with normal profits, if the estimated future profit are more than the normal profit then the difference is known as Super Profit. This is the measure of

extra profit earned by the firm. Goodwill is found by multiplying the Super Profit by no. of years in which the Super Profit is expected in future.

Step1: Ascertain capital employed and Average Capital employed.

Step2: Find the normal profit on the basis of normal rate of return, there is no uniformity of treatment in this regard; some authors calculate normal profit on capital employed. While other calculate on average employed. However, it is preferable to calculate normal profit on average capital employed.

Step 3: Ascertain future maintainable profits of the concern

Step 4: Calculate super profit deducting normal profit from the future maintainable profit.

Step 5: Find out goodwill by multiplying super profit by the no. of years they are expected to be earned.

5.4 Capitalization Method: Under this method, the value of goodwill is calculated by capitalizing the super profit at the normal rate of return. This method attempts to determine the amount of capital needed for earning super profits. The value of goodwill is calculated by the following formula:

$$= \frac{\text{Average Annual Super Profit}}{\text{Normal Rate of Return}} \times 100$$

5.5 Simple Profit method: In this method goodwill is valued on the basis of a certain number of years' purchases of the average profits of the past few years. For example, if the average annual profits of a business for the past 5 years are Rs 10,000 and goodwill is to be valued on the basis of 2 years' purchase of such average annual profits, the value of goodwill will be Rs20,000.

In case of Super profit method, goodwill is based on the average annual super profit earned by the business. The term super profit means the profit over and above the normal profit. This method is most popular for valuation of goodwill in case of joint stock companies. However, in case of this method, goodwill can also be valued by any of the following methods:

a) Purchase of super profit method. According to this method, the value of goodwill is ascertained as follows:

Average Annual Super Profit x Number of years

For example, if the amount of average annual super profit is Rs 3,000, and it is expected that the purchaser of the business will be in a position to maintain this profit for three years (only on account of old reputation of the business), the value of the goodwill will be Rs 9,000.

b) Sliding Scale Valuation of Super Profit: This method of valuation of goodwill is a slight variation of the purchase of super profit method. It has been advocated by A.E. Cutforth. The method is based on the theory that the greater the amount of super profits the more difficult, it would be to maintain it. The super profit in this case is divided into two or three divisions. Each of these divisions is multiplied by a different number of years, purchase in descending order from first division.

For example, if the amount of super profit is estimated at Rs.6,000 the value of the goodwill it will be calculated as under: First Rs. 2,000 at (say) 3 years purchase 6,000 Second Rs, 2,000 at (say) 2 years purchase 4,000
Third Rs. 2,000 at (say) 1 years purchase 2,000
Total value of goodwill **Rs. 12,000 .**

c) Annuity Method of Super Profit: This method is based on the logic that the purchaser should pay not for goodwill only the present value of super profits calculated at a proper rate of interest. In other words, goodwill in case of this method is the discounted value of the total amount calculated as per purchase of super profit method. The value of goodwill in case of this method is ascertained as follows:

Average Annual Super profit x Annuity Rate

Example: Average annual super profit Rs. 5,000, Rate of Interest 10% In case goodwill is to be valued at 3 years purchase of the average annual super profit reference will have to be made to the annuity table for finding out the present value of one rupee paid annually for 3 years at 10% interest. Reference to annuity table shows that Rs. 2.48685 is the present value of an annuity of Re 1 for three years. The value of goodwill will, therefore, be ascertained as follows: Rs. 5,000 x 2.48685 = Rs 12,434 or (say) Rs 12,500.

UNIT-3 IMPORTANT QUESTIONS

- ✓ Explain Methods of Inventory Valuation? Merits & de-merits?
- ✓ Explain Methods of good will Valuation? Merits & de-merits?

Problems: LIFO, FIFO SIMPLE & WEIGHTED AVERAGE.

(17E00104) FINANCIAL ACCOUNTING FOR MANAGERS

The Objective of the course is to provide the basic knowledge of book keeping and accounting and enable the students to understand the Financial Statements and make analysis financial accounts of a company.

*** Standard discounting and statistical tables to be allowed in the examinations.**

1. **Introduction to Accounting:** Definition, Importance, Objectives, uses of accounting and book keeping Vs Accounting, Single entry and Double entry systems, classification of accounts – rules of debit & credit.
2. **The Accounting Process:** Overview, Books of Original Record; Journal and Subsidiary books, ledger, Trial Balance, Final accounts: Trading accounts- Profit & loss accounts- Balance sheets with adjustments, accounting principles.
3. **Valuation of Assets:** Introduction to Depreciation - Methods (Simple problems from Straight line method, Diminishing balance method and Annuity method). Inventory Valuation: Methods of inventory valuation (Simple problems from LIFO, FIFO, Valuation of goodwill - Methods of valuation of goodwill.
4. **Financial Analysis -I** Analysis and interpretation of financial statements from investor and company point of view, Liquidity, leverage, solvency and profitability ratios – Du Pont Chart -A Case study on Ratio Analysis
5. **Financial Analysis-II:** Objectives of fund flow statement - Steps in preparation of fund flow statement, Objectives of Cash flow statement- Preparation of Cash flow statement - Funds flow statement Vs Cash flow statement.

Textbooks:

- Financial Accounting, Dr.S.N. Maheshwari and Dr.S.K. Maheshwari, Vikas Publishing House Pvt. Ltd.,
- Accountancy .M P Gupta & Agarwal ,S.Chand

References:

- Financial Accounting , P.C.Tulisan ,S.Chand
- Financial Accounting for Business Managers, Asish K. Bhattacharyya, PHI
- Financial Accounting Management An Analytical Perspective, Ambrish Gupta, Pearson Education
- Accounting and Financial Management, Thukaram Rao, New Age Internationals.
- Financial Accounting Reporting & Analysis, Stice & Stice, Thomson
- Accounting for Management, Vijaya Kumar, TMH
- Accounting for Managers, Made Gowda, Himalaya
- Accounting for Management , N.P.Srinivasan, & M.Shakthivel Murugan, S.Chand

Subject:

FINANCIAL ACCOUNTING FOR MANAGERS



Tools of Financial Analysis

Comparative Financial Statements

Common-size Financial Statements

Trend Percentages

Ratio Analysis

Fund Flow Statement

Cash Flow Statement



UNIT-4

FINANCIAL ANALYSIS – I

4.1. ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS FROM INVESTOR AND COMPANY POINT OF VIEW

1.1 NATURE OF FINANCIAL STATEMENTS:

Financial statements are the basic and formal means through which the corporate management communicates financial information to various external users. Financial statements are primarily directed towards the needs of owners and incidentally to the needs of other external parties which include investors, tax authorities, governments, employees etc. the following definitions bring out the meaning of financial statements.

According to American Institute of Certified Public Accountants (AICPA), “Financial statements are prepared for the purpose of presenting a periodical review or report on progress made by the management and deal with the status of investment in the business and the results achieved during the period under review.

4.1.2 TYPES OF FINANCIAL STATEMENTS:

Financial statements generally include two statements known as income statement and balance sheet. The prime attention of accounting process is paid on distinguishing between the revenue items from capital items. Revenue items include both revenue receipts as well as revenue payments. They are of nominal nature, hence need to be matched and net results are to be identified. The statement, which takes care of this process, is known as income statement. After matching the revenue receipts with that of revenue payments, the remaining balances are of capital nature. They include items, which have potential uses and future obligations known as assets and liabilities. The statement, which shows total of assets and liabilities, is known as balance sheet. As per generally accepted accounting principles financial statements are as follows:

- i) Balance sheet
- ii) Income statement
- iii) Statement changes in owners’ account
- iv) Statement of changes in financial position

The two basic or major financial statements known as balance sheet and income statement are required for external reporting and also for internal needs of the management like planning, decision making and control. These two basic statements are supported by number schedules, annexure, supplementing the data contained in the balance sheet and income statement. Apart from these two basic financial statements, there is a need to know about movements of funds and changes in the financial position of the company. A statement of retained earnings and the statement of changes in financial position help in this direction.

4.1.3 USES AND IMPORTANCE OF FINANCIAL STATEMENTS:

Financial statements, which are prepared depicting true, relevant, easily understandable, comparable, analytically represented and promptly presented financial position, help the users in their economic decisions. The users of financial statements include management, investors, shareholders, creditors, government, bankers, employees and public at large. They provide not only information about the performance of the management to the various parties interested in the organization but also help in taking appropriate decisions. The uses and importance of financial statements are presented below:

- a) **Report on stewardship function:** Financial statements report on the performance of the policies of the management to the shareholders. The gaps in the management and ownership can be understood with the help of financial statements.
- b) **Basis for fiscal policies:** the fiscal policies particular taxation policies of the government are related with the financial performance of corporate undertakings. Thus financial statements provide basic input for industrial and taxation and other socio-economic policies of the government.
- c) **Basis for dividend policies:** the dividend policies of the corporate sector are linked with the government regulations and financial performance of the undertaking. Hence, financial statements form basis for dividend policies of companies.
- d) **Basis for granting of credit:** corporate undertakings have to borrow funds from banks and other financial institutions for different purposes. Credit granting institutions take decisions based on the financial performance of the undertakings. Thus financial statements form basis for granting of credit.
- e) **Basis for prospective investors:** the investors include both short term and long term investors. Their prime considerations in their investment decisions are security and liquidity of their investment with reasonable profitability. Financial statements help

the investors to assess long term and short term solvency as well as the profitability of the concern.

- f) **Guide to the value of the investment already made:** shareholders of companies are interested in knowing the status, safety and return on their investment. They may also need information to take decision about continuation or discontinuation of their investment in the business. Financial statements provide information to the shareholders in taking such important decisions.
- g) **Aids government in policy framework:** the government studies the financial statements of corporate undertakings to assess the role of corporate undertakings in the economic development of the country. It also studies the economic situation of the country from these statements in terms of industrial production, employment, technological development etc. these statements enable the government to know whether business is following various rules and regulations or not. These statements also form a base for framing and amending various laws for the regulation of the business.
- h) **Helps trade associations in helping their members:** trade associations may analyze the financial statements for the purpose of providing service and protection to the members. They may develop standard ratios and design uniform system of accounts.
- i) **Helps stock exchanges:** financial statements help the stock exchanges to understand the extent of transparency in reporting on financial performance and enables them to call for required information to protect the interest of investors. The financial statements enable the stock brokers to judge the financial position of different concerns and take decisions about the prices to be quoted.

4.1.4 LIMITATIONS OF FINANCIAL STATEMENTS:

Though utmost care is taken in the preparation of financial statements to be useful to the users, they suffer from the following limitations:

- 1) Net profit is ascertained on the basis of historical cost. If profits are adjusted to changing price levels, it may lead to loss and consequently dividends may be paid out of capital.
- 2) Accounting is done on the basis of certain conventions; eg: the assets are valued on the going concern basis. Some of the assets may not realize the stated values, if the liquidation is forced on the company. Assets shown in the balance sheet reflect merely unexpired or unamortized cost.

- 3) The balance sheet is prepared at a point of time and the accounting year may be deliberately chosen in such a manner that it gives favorable picture.
- 4) Financial statements are the outcome of recorded facts, concepts and conventions used and value judgments made in different situations by the accountants. Hence, bias may be observed in the results.
- 5) Financial statements show aggregate information but not specific information. Hence they may not satisfy the users in decision making unless modified suitably.
- 6) Balance sheet does not disclose information relating to changes in management, loss of markets and cessation of agreements, which have vital bearing on the enterprise.
- 7) Financial statements contain only monetary information but not qualitative information like industrial relations, industrial climate, labor relations, quality of work and labor etc.
- 8) Profit and loss account discloses only interim profits but not final profits. Final profits can be known only when enterprise is liquidated.

4.1.5 ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENTS :The

process of critical examination of the financial information contained in the financial statements in order to understand and make decisions regarding the operations of the firm is called "financial statement analysis". It is basically a study of the relationship among various financial facts and figures as given in a set of financial statements.

4.1.6 OBJECTIVES OF FINANCIAL STATEMENT ANALYSIS

- 1) To provide adequate information about the source of finance and obligations of the finance firm.
- 2) To provide reliable information about the financial performance and financial soundness of the concern.
- 3) To provide sufficient information about results of operations of business over a period of time.
- 4) To provide useful information about the financial conditions of the business and movement of resources in and out of business.
- 5) To provide necessary information to enable the users to evaluate the earning performance of resources or managerial performance in forecasting the earning potentials of business.

4.1.7 CHARACTERISTIC & FUNCTIONS OF FINANCIAL STATEMENT ANALYSIS

- 1) **Understandability:** The information must be readily understandable to users of the financial statements. This means that information must be clearly presented, with additional information supplied in the supporting footnotes as needed to assist in clarification.
- 2) **Relevance:** The information must be relevant to the needs of the users, which is the case when the information influences the economic decisions of users. This may involve reporting particularly relevant information, or information whose omission or misstatement could influence the economic decisions of users.
- 3) **Reliability:** The information must be free of material error and bias, and not misleading. Thus, the information should faithfully represent transactions and other events, reflect the underlying substance of events, and prudently represent estimates and uncertainties through proper disclosure.
- 4) **Comparability:** The information must be comparable to the financial information presented for other accounting periods, so that users can identify trends in the performance and financial position of the reporting entity.

4.1.8 TYPES OF ANALYSIS AND INTERPRETATION:

As you have already learnt, various users of financial statements study them from different angles for different purposes. However, the 'modus operandi and the material used are identified by Man Mohan and Goyal as two common bases used for classification.

Modus operandi: on the basis of number of years, financial statements used for analysis and interpretation, the analysis may be classified into vertical and horizontal analysis.

a. Vertical analysis: when the analysis of financial statements of an organization is made for only one accounting period, it is called as vertical analysis. For instance, analyzing and interpreting the performance of a company for the year 2004 with the help of profit and loss account of that company for the year ending 31st December, 2004 and the balance sheet of that company so on that date.

Balance sheet of XYZ Company as on 31.12.2004

| | Amount | Amount |
|------------------------------------|------------|---------------|
| Uses of Funds | Rs | Rs |
| Fixed Assets | | |
| Land & Building | XXX | |
| Plant & Machinery | XXX | |
| Furniture & Fixtures | XXX | XXX |
| Current Assets | | |
| Stock-in-trade | XXX | |
| Sundry Debtors | XXX | |
| Bills Receivables | XXX | |
| Cash at bank | XXX | |
| Cash in hand | XXX | |
| | XXX | |
| Current Liabilities | | |
| Sundry Creditors | XXX | |
| Bills payable | XXX | |
| Outstanding Expenses | XXX | |
| | XXX | |
| Net working capital (CA-CL) | | XXXXXX |
| Total net Assets | | XXXXXX |
| Sources of funds | | |
| Owners Funds | | |
| Equity Share Capital | | |
| Reserves & Surplus | | |
| Long Term liabilities | | |
| Total | | <u>XXXXXX</u> |

b. Horizontal analysis: When the analysis of financial statements of an organization is made for two or more years, it is called as 'horizontal analysis'. Since the data for more than one year are used, it is possible to compare the performance of the company during a year with that of the previous year. This helps to identify the trend in various indicators of performance such as improved profitability of an organization, its solvency, liquidity, etc.,

over the years. For instance, comparison of performance of an undertaking for the year 2004 with that of 2003, can be taken as horizontal analysis.

| Capital & Liabilities | Amount | Assets & Property | Amount |
|--|-------------|---|-------------|
| Capital: Equity share capital Preference share capital Reserves & Surplus LONG TERM LAIBILITIES Debentures Loan Mortgage Current Liabilities' Creditors Bills Payables Bank Loan Outstanding Expenses | | Fixed Assets Good will Land & Building Plant & Machinery Furniture & Fixtures Investments Current Assets Stock in trade Debtors Bills Receivable Cash at bank Cash in hand | |
| | <u>XXXX</u> | | <u>XXXX</u> |

II) Material used:

Analysis and interpretation of Financial Statement maybe external or internal depending upon the material or information used.

a. External Analysis: The financial statements are prepared and presented to out sides including shareholders and employees. Normally, external people do not have an easy access to the detailed accounting records of the organization. The outsiders have to rely on the figures in the financial statements and other supplement in the annual reports of the purpose of analysis and interpretation to form an idea about the financial health of the company and to take appropriate decisions. Such type of analysis by the people external to the organization is called 'external analysis. Due to this reason of non-availability of detailed information, this type of analysis serves only a very limited purpose.

b. Internal analysis: when the financial statements of an organization are analyzed and interpreted by the people internal to the organization and who have an easy access to the detailed accounting records for the purpose of assisting the material personal to take correct measures and appropriate decisions, is called “internal analysis”. As complete set of information is available to the analyst, he can analyze the performance of the organization clearly stating the reasons for improvements or decreasing trends in various indicators of performance.

4.1.9 TECHNIQUES OF FINANCIAL ANALYSIS:

Financial statement analysis is done to emphasize the comparative and relative importance of data presented and at the same time evaluate the position of the firm. This purpose of financial data analysis is satisfied by using various suitable techniques. The techniques show the relationships and changes. Most widely known techniques of financial statement analysis are:

- 1) Comparative statements
- 2) Common size statements
- 3) Trend analysis
- 4) Funds flow statement
- 5) Cash flow analysis
- 6) Ratio analysis

1) Comparative financial statement analysis: Here, both the profit and loss account and balance sheet are prepared by providing columns to the figures for both, the current year as well as for the previous year and for the changes during the year both, in absolute and relative terms. As a result, it is possible to find out not only the balances of account as on different dates and summarized of different operational activities of different periods, but also the extent of their increase or decrease between these dates. The figures in the comparative statements can be used for identifying the direction of changes and also the trends in different indicators of performance of an organization.

2) Common size financial statement analysis: Common size statement is a financial tool for studying the key changes and trends in the financial position (balance sheet) and financial result (profit and loss account) of a company. Here each item in the statement is stated as a

percentage of totals of which that item is a part. Thus, each percentage exhibits the relation of the individual item to its respective total.

First, state the total of the statement 100% and then compute the ratio of each statement item to the statement total.

Inter-firm comparison or comparison of the company's position with the related industry as a whole is possible with the help of vertical common size statement analysis. Horizontal common size statement analysis facilitates trend analysis of the financial result and financial position of the statement of the company over the past several years.

3)Trend analysis: The financial statements may be analyzed by computing trends of series of information. Trend analysis determines the direction upwards or downwards and involves the computation of the percentage relationship that each statements item bears to the same item in the base year.

Procedure for calculating trends:

One year is taken as base year. Generally the first or the last year is taken as base year. The figures of base year are taken as 100. The trend percentages are calculated in relation to base year. If a figure in other year is less than the figure in base year, the trend percentage will be less than 100 and it will be more than 100 if figure is more than the base year figure. Each year's figure is divided by the base year figure.

Trend ratio = present year value/base year value*100

The base period should be carefully selected. The base period should be a normal period. The accounting procedures and conventions used for collecting data and preparation of financial statements should be similar; otherwise the figures will not be comparable.

The interpretation of trend analysis involves a cautious study. The mere increase or decrease in trend percentage may give misleading results. For example, an increase of 20% in current assets may be treated favorable. If this increase in current assets is accompanied by an equivalent increase in current liabilities, then this increase will be unsatisfactory. The increase in sales may not increase profits if cost of production has gone up.

4) Funds flow statement: As the name implies statement of sources and uses of funds depicts the sources from which funds are obtained and uses to which they are put.

According to Foulke defined funds flow statement as “A statement of sources and application of funds is a technical device designed to analyze the changes in the financial conditions of a business enterprise between two dates”.

Preparation of funds flow statement:

The preparation of funds flow statement is divided into two parts viz.,

- a)Statement of changes in working capital and
- b)Statement of Sources and Uses of funds.

5) Cash Flow Statement: A statement of changes in the financial position of firm on cash basis is called a cash flow statement ..A cash flow statement summarizes the causes of changes in cash position of business enterprises between dates of two balance sheets. It is called a cash flow out flow (uses) of cash.

Preparation of cash Flow statement:

The cash flows shown in the statement are grouped in to three main categories of cash inflows and cash outflows viz., Cash flows from operating activities , cash flows investing activities and cash flows from financing activities. A brief description of these items is discussed below:

- A) Cash flows from operating activities
- B) Cash flows from investing activities
- C) Cash flows from financing activities

6) Ratio Analysis: Single most important technique of financial analysis in which quantities are converted into ratios for meaningful comparisons, with past ratios and ratios of other firms in the same or different industries. Ratio analysis determines trends and exposes strengths or weaknesses of a firm.-*Bust Noon*

4.2. RATIO ANALYSIS:

Ratio Analysis is a form of Financial Statement Analysis that is used to obtain a quick indication of a firm's financial performance in several key areas. The ratios are categorized as Short-term Solvency Ratios, Debt Management Ratios, Asset Management Ratios, Profitability Ratios, and Market Value Ratios.

Ratio Analysis as a tool possesses several important features. The data, which are provided by financial statements, are readily available. The computation of ratios facilitates the

comparison of firms which differ in size. Ratios can be used to compare a firm's financial performance with industry averages. In addition, ratios can be used in a form of trend analysis to identify areas where performance has improved or deteriorated over time.

Because Ratio Analysis is based upon Accounting information, its effectiveness is limited by the distortions which arise in financial statements due to such things as Historical Cost Accounting and inflation. Therefore, Ratio Analysis should only be used as a first step in financial analysis, to obtain a quick indication of a firm's performance and to identify areas which need to be investigated further.

4.2.1 OBJECTIVES OF RATIO ANALYSIS:

(1) Measuring the profitability: Profitability is the profit earning capacity of the business. This can be measured by Gross Profit, Net Profit, Expenses and Other Ratios. If these ratios fall we can take corrective measures.

(2) Determining operational efficiency: Operational efficiency of the business can be determined by calculating operating / activity ratios.

(3) Measuring financial position: Short-term and long-term financial position of the business can be measured by calculating liquidity and solvency ratios. In case of unhealthy short or long-term position, corrective measures can be taken.

(4) Facilitating comparative analysis: Present performance can be compared with past performance to discover the plus and minus points. Comparison with the performance of other competitive firms can also be made.

(5) Indicating overall efficiency: Profit and Loss Account shows the amount of net profit and Balance Sheet shows the amount of various assets, liabilities and capital. But the profitability can be known by calculating the financial ratios.

(6) Budgeting and forecasting: Ratio analysis is of much help in financial forecasting and planning. Ratios calculated for a number of years work as a guide for the future. Meaningful conclusions can be drawn for future from these ratios.

4.2.2 ADVANTAGES OF RATIO ANALYSIS

- 1. Performance over time:** Ratio analysis is a strong indicator of the financial performance of a company over time. An analyst can calculate the same ratio across different time periods to identify particular components of a company's financial performance that may be improving or declining. Ratio analysis uses relative percentages rather than dollar amounts, allowing for ease of comparison across periods. Ratio analysis may help distinguish between firms that may fail and firms that are profitable. Through the careful use of financial ratio analysis, an analyst may be able to detect financial troubles up to five years before a firm fails.
- 2. Performance against competitors:** Ratio analysis can be used to assess the performance of a company against other competitors that operate within the same industry. Companies that operate in the same industry generally exhibit similar financial profiles. Thus, a calculated ratio that is significantly above or below the industry average may indicate a particularly strong or particularly weak performance by the company in certain areas.

4.2.3 DISADVANTAGES OF RATIO ANALYSIS

- 1. Narrow Focus:** Ratio analysis may lead to a narrow focus on certain elements of a company's financial performance. It is important to consider all ratios in relation to one another.
- 2. Accounting Methodologies:** Certain ratios may be adversely affected by a company's accounting methodologies.

4.2.4 TOOLS FOR RATIO ANALYSIS (OR) TYPES RATIO :

- 1) Liquidity Ratios:** They measure the firm's ability to meet current obligations. Current ratio, cash ratio, quick ratio, net working capital ratio it measures the firm's ability to meet current obligations
- 2) Leverage Ratios:** These ratios show the proportion of debt and equity in financing the firm's assets. Debt ratio, debt equity ratio capital employed to net worth ratio it shows the proportions of debt and equity in financing the firm's assets

- 3) **Activity Ratios:** They reflect the firm's efficiency in utilizing the assets. Inventory turnover ratio, debt turnover ratio, collection period, total assets turnover ratio, fixed and current assets turnover ratio, creditor turnover ratio, working capital ratio etc, Activity ratio reflect the firms efficiency in utilizing its assets
- 4) **Profitability Ratios:** These ratios measure overall performance and effectiveness of the firm. Gross profit, net profit, operating, return on equity, return on investment .it measures overall performance and effectiveness of the firm.

4.3. DUPONT CHART

The DuPont analysis also called the DuPont model is a financial ratio based on the return on equity ratio that is used to analyze a company's ability to increase its return on equity. In other words, this model breaks down the return on equity ratio to explain how companies can increase their return for investors.

The DuPont analysis looks at three main components of the ROE ratio.

- ❖ Profit Margin
- ❖ Total Asset Turnover
- ❖ Financial Leverage

The DuPont Corporation developed this analysis in the 1920s. The name has stuck with it ever since

Based on these three performances measures the model concludes that a company can raise its ROE by maintaining a high profit margin, increasing asset turnover, or leveraging assets more effectively.

4.3.1 Formula

The Dupont Model equates ROE to profit margin, asset turnover, and financial leverage. The basic formula looks like this.

DuPont Analysis

$$\text{Return on Equity} = \text{Profit Margin} \times \text{Total Asset Turnover} \times \text{Financial Leverage}$$

Since each one of these factors is a calculation in and of itself, a more explanatory formula for this analysis looks like this.

| DuPont Analysis | | | | | |
|--------------------|--|---|--|---|---|
| | Profit Margin | x | Total Asset Turnover | x | Financial Leverage |
| Return on Equity = | $\frac{\text{Net Income}}{\text{Net Sales}}$ | | $\frac{\text{Net Sales}}{\text{Average Total Assets}}$ | | $\frac{\text{Total Assets}}{\text{Total Equity}}$ |

Every one of these accounts can easily be found on the financial statements. Net income and sales appear on the income statement, while total assets and total equity appear on the balance sheet.

4.3.2 USE OF DUPONT ANALYSIS

Using the modified equation of Return on Equity, one can make a more informed decision and understand the company position better. If the Return on Equity either increases due to increase in operating efficiency or improved asset utilization, it is a good sign for investors. It would imply that either company is making higher margins on its sales or the company is making better use of its assets or both.

On the other hand, if the Return on Equity increases on account of financial leverage, it would imply that the profit is due to the financial strategy of the company rather than good operations of it. Too higher a debt ratio also makes a company riskier proposal for investment.

In essence, a manager should try increasing the ROE by way of either higher operating efficiency or better asset utilization. There is no reservation for using the third parameter also i.e. financial leverage, but it will increase the risk of bankruptcy in case the lenders asks for the large sum of money.

Example Explaining DuPont Analysis

Consider a hypothetical scenario of companies X and Y with below numbers.

| | X | Y |
|--|------|------|
| 1. Operating profit margin ratio | 0.20 | 0.12 |
| 2. Asset turnover ratio | 0.30 | 0.30 |
| 3. Financial Leverage or Equity multiplier | 2.00 | 3.33 |
| ROE (1*2*3) | 0.12 | 0.12 |

Types of Ratio:

1. Liquidity Ratio :-

a) current ratio = $\frac{\text{current Assets}}{\text{current liabilities}}$.

b) Quick (or) Acid test (or) liquidity Ratio.

= $\frac{\text{Liquid/Quick Assets}}{\text{current liabilities}}$.

* current Assets :-

1. sundry debtors.
2. Bills Receivables
3. cash in hand.
4. cash at bank.
5. closing stock.
6. prepaid Expenses.
7. Marketable securities.

current liabilities :-

1. sundry creditors.
2. bills payables.
3. Outstanding Expenses.
4. Bank over draft.
5. provision for taxation.

Quick Assets (or) Acid test (or) liquidity Ratio :-

* current Assets - Inventory - prepaid Expenses.

cash Ratio = $\frac{\text{cash} + \text{Bank} + \text{Marketable securities}}{\text{current liabilities}}$.

problem:

1. From the following information calculate current, Quick and cash Ratio.

| Liabilities | Amount | Assets | Amount |
|------------------------|----------|------------------------|-----------|
| Equity share capital | 1,00,000 | Land and Building | 3,60,000. |
| 80% preference capital | 1,10,000 | plant and Machinery | 5,00,000. |
| Reserves | 40,000 | Furniture and Fixtures | 1,00,000. |
| profit and loss A/c | 2,10,000 | stock | 95,000. |
| 15% Debentures | 8,00,000 | Debitors | 2,00,000. |
| Trade creditors | 40,000 | Marketable securities | 80,000. |
| Bills payable | 30,000 | cash | 50,000. |
| out standing Expenses | 20,000 | Bills Receivable | 5,000 |
| Bank over draft | 5,000 | prepaid Expenses | 5,000. |
| provision for taxation | 40,000 | preliminary Expenses | 60,000. |

Current Ratio:

$$\text{Current Ratio} = \frac{\text{current Assets}}{\text{current liabilities}}$$

$$= \text{sundry Debtors} + \text{Bills}$$

Receivables + stock + cash in hand + cash at bank + prepaid Expenses + market securities.

sundry creditors + Bills payable + out standing Expenses + Bank over draft + provision for taxation.

$$= 2,000,00 + 5000 + 95000 + 50,000 + 0 + 5000 + 80,000$$

$$40,000 + 30,000 + 20,000 + 5000 + 40000$$

$$= \frac{4,35,000}{1,35,000}$$

$$= 3.22 : 1$$

2) Quick Ratio:

$$\text{Quick Ratio} = \frac{\text{current Assets} - \text{Inventory} - \text{prepaid Expenses}}{\text{current liabilities.}}$$

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{current liabilities}}$$

$$= \frac{\text{current Assets} - \text{Inventory} - \text{prepaid Expenses}}{\text{current liabilities.}}$$

$$= \frac{4,35,000 - 95,000 - 5000}{13,50,000}$$

$$= \frac{33,5000}{13,50,000}$$

$$= 2.48 : 1$$

3) Cash Ratio:-

$$\text{Cash Ratio} = \frac{\text{cash} + \text{Bank} + \text{Marketable Securities}}{\text{current liabilities}}$$

$$= 50,000 + 0 + 80,000$$

$$\frac{\quad}{1,35,000}$$

$$= \frac{1,30,000}{1,35,000}$$

$$\frac{\quad}{1,35,000}$$

$$= 0.9631$$

2) Leverage Ratio :-

1. Debt - Equity Ratio = $\frac{\text{Total long term Debt}}{\text{Share holders Fund}}$

(OR)

External Equities.

Internal Equities.

Where, Total long term debt = Debenture + long term loans + term loans + loan on Mortgage + loans from financial Institutions + Redeemable preference share capital.
Share holders Fund :-

Share holders Fund = Equity share capital + Irredeemable preference capital + capital Reserves + Retained earnings + any other surplus provisions - Fictitious Assets.

1) From the following information calculate debt equity ratio.

| | |
|------------------|-----------|
| Debt debentures | 1,40,000. |
| long term loan | 60,000. |
| Bank balance | 30,000. |
| Debtors | 70,000 |
| general Reserves | 40,000 |
| creditors | 66,000 |
| share capital | 1,20,000. |
| bills payable | 14,000. |

$$\text{debt equity ratio} = \frac{\text{Total long term debts}}{\text{Share holders Funds.}}$$

$$= \frac{\text{Debt debentures} + \text{long term loan}}{\text{share capital} + \text{general Reserves.}}$$

$$= \frac{1,40,000 + 60,000}{12,0000 + 40,000}$$

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

$$= 1.25 : 1$$

Proprietary / Equity Ratio:-

$$\text{P.E.R} = \frac{\text{Proprietary Funds (share holders Funds)}}{\text{Total Assets.}}$$

2) Proprietor Funds are 6,00,000.

| | |
|-----------|-----------|
| Building | 2,00,000. |
| Machinery | 1,00,000. |
| Furniture | 2,50,000 |
| land | 50,000. |

$$\text{Proprietor Funds} = \frac{\text{Share holders Funds (S) P.F.}}{\text{Total Assets.}}$$

$$= \frac{6,00,000}{2,00,000 + 1,00,000 + 2,50,000 + 50,000}$$

$$= \frac{6,00,000}{6,00,000}$$

$$= 1:1$$

3) Interest Coverage Ratio:-

$$\text{debt Service Ratio} = \frac{\text{Net profit before Interest and tax.}}{\text{Interest on long term debt.}}$$

1) The Net profit after tax of a firm is 75,000. and its fixed Interest charges on long term borrowings are 30,000. The Rate of Income tax is 50%. calculate Interest coverage ratio.

Net profit (After tax) = 75,000
 Tax 50% = 75,000.
 Interest = 30,000.

Interest (Net profit before tax and Interest) = 1,80,000

Interest = 30,000

1,50,000

Tax 50% and Interest

75,000

Net profit After tax.

75,000

$$\text{Interest coverage Ratio} = \frac{1,80,000}{30,000} = 6:1$$

capital gearing Ratio:

$$\text{capital gearing Ratio} = \frac{\text{Equity share capital}}{\text{Reserves and surplus.}}$$

preference share capital + long term debt bearing Fixed Interest.

1) From the following Information find out capital gearing ratio.

| Particulars | 2001-02 | 2002-03. |
|--------------------------------|----------|-----------|
| 1. Equity share capital | 6,00,000 | 4,00,000. |
| 2. Reserves and surplus. | 3,00,000 | 2,00,000. |
| 3. 8% preference share capital | 2,50,000 | 4,00,000. |
| 4. 6% debentures | 2,50,000 | 4,00,000. |
| 5. Fixed Assests | 2,00,000 | 4,00,000. |

capital gearing ratio =

Equity share capital + Reserves and surplus

preference share capital + long term debt bearing fixed interest.

$$2001-02 = \frac{6,00,000 + 3,00,000}{2,50,000 + 2,50,000}$$

$$= \frac{9,00,000}{50,0000}$$

$$= 1.8 : 1$$

$$2002-2003 = \frac{4,00,000 + 2,00,000}{4,00,000 + 4,00,000}$$

$$= \frac{6,00,000}{8,00,000}$$

$$= 0.75 : 1$$

| 2) particulars | Year (2001-02) | year (2002-03) |
|--------------------------------|-------------------|-------------------|
| 1. Equity share capital | 606000 | 404000 |
| 2. Reserves and surplus | 303000 | 202000 |
| 3. 8% preference share capital | 252500 | 404000 |
| 4. 6% debentures | 252500 | 404000 |

| | | |
|-------------------------|--------|---------|
| 5. Fixed Assets | 202000 | 404000. |
| 6. Outstanding Expenses | 10100 | 15150. |

Capital gearing ratio = $\frac{\text{Equity share capital} + \text{Reserves and surplus.}}{\text{preference share capital} + \text{long term debt bearing fixed interest.}}$

2001-02 = $\frac{606000 + 303000}{252500 + 252500}$

$$= \frac{909000}{505000}$$

$$= 1.8:1$$

$$2002-03 = \frac{404000 + 202000}{404000 + 404000}$$

$$= \frac{606000}{808000}$$

$$= 0.75:1$$

3) Activity Ratio:—

a) Fixed Assets turnover Ratio:—

$$= \frac{\text{Net sales}}{\text{Net fixed Assets}}$$

where, Net sales = total sales - sales Returns.

Net Fixed Assets = Gross fixed Assets - depreciation.

1) ABC company has gross fixed Assets of Rs 5,00,000 and Accumulated depreciation is 2,00,000. Sales over the last 1 year was 9,00,000/- calculate fixed Assets turnover Ratio.

Fixed Assets turnover Ratio

= Net sales

Net Fixed Assets

= 9,00,000

5,00,000 - 2,00,000

= 9,00,000

3,00,000

= 3 times //

Stock (Inventory) turn over ratio:-

= cost of goods sold

Average Inventory.

Where, cost of goods sold = sales - gross profit.

(or)

cost of goods sold = opening stock + purchases
+ Direct Expenses - closing stock.

Average Inventory = opening stock + closing stock

2.

(08)

$$\text{Stock turn over ratio} = \frac{\text{Net sales}}{\text{Average stock}}$$

$$\text{Inventory conversion period Ratio} = \frac{365 \text{ days}}{\text{Inventory turn over Ratio}}$$

1) Mr. Ravi and co. supplies the following information for the year ending 31-Dec-2013.

- credit sales = 1,75,000/-
- cash sales = 2,50,000/-
- sales Returns = 25,000/-
- Opening stock = 25,000/-
- closing stock = 35,000/-

$$\begin{aligned} \text{Stock turn over ratio} &= \frac{\text{cost of goods sold}}{\text{Average Inventory}} \\ &= \frac{15,000}{30,000} \\ &= 0.5 \text{ times.} \end{aligned}$$

$$\begin{aligned} \text{Cost of good sold} &= \text{sales} - \text{gross profit} \\ &= 1,75,000 + 2,50,000 - 4,10,000 \\ &\Rightarrow 4,25,000 - 4,10,000 \\ &= 15,000. \end{aligned}$$

$$\begin{aligned}
 \text{Average Inventory} &= \frac{\text{opening stock} + \text{closing stock}}{2} \\
 &= \frac{25,000 + 35,000}{2} \\
 &= \frac{60,000}{2} \\
 &= 30,000/-
 \end{aligned}$$

$$\begin{aligned}
 \text{Inventory conversion period} &= \frac{365}{0.5} \\
 &= 730 \text{ days.}
 \end{aligned}$$

Debtors turn over Ratio:—

$$= \frac{\text{Net credit sales}}{\text{Average Account Receivables}}$$

$$\text{Avg Receivables} = \frac{\text{opening Receivables} + \text{closing Receivables}}{2}$$

$$\begin{aligned}
 \text{debtors collection period (or) debtors Velocity} \\
 &= \frac{\text{Average trade debtors}}{\text{Net sales}} \\
 &\quad \frac{1}{\text{No. of working days.}}
 \end{aligned}$$

3) calculate debtors turn over ratio and Avg debt collection period from the year 2012 to 2013.

| Particulars | 2012 | 2013 |
|------------------------------|--------|--------|
| Sundry debtors | 15,000 | 45,000 |
| Bills Receivables | 5,000 | 15,000 |
| provision for doubtful debts | 15,000 | 4,500 |

Total sales - 2,20,000/-

sales Return - 20,000/-

cash sales - 40,000/-

Debtors turnover Ratio.

$$= \frac{\text{Net credit sales}}{\text{Average Account Receivables (or) Avg Debtors}}$$

$$= \frac{1,60,000}{40,000}$$

$$= 4 \text{ times.}$$

$$\begin{aligned} \text{Net credit sales} &= 2,20,000 - 20,000 \\ &= 2,00,000. \end{aligned}$$

$$\begin{aligned} \text{Credit sales} &= 2,00,000 - 40,000 \\ &= 1,60,000. \end{aligned}$$

$$\begin{aligned} \text{Avg Debtors} &= \frac{\text{Opening Debtors} + \text{Opening Bills Receivables} \\ &\quad + \text{c. Debtors} + \text{closing Bills Receivables}}{2} \end{aligned}$$

$$= \frac{15,000 + 5,000 + 45,000 + 15,000}{2}$$

$$= 80,000$$

Debtors collection period = $\frac{365}{4} = 91$ days.

Formula, = $\frac{365}{\text{Debt turnover Ratio}}$

Creditors turnover Ratio (or) payable turnover Ratio.

= $\frac{\text{Net credit purchases}}{\text{Average trade creditors}}$.

Where, Net credit purchases = gross credit purchases - purchase Returns.

Average trade creditors = $\frac{\text{creditors} + \text{bills payable}}{2}$
(or)

Average trade creditors = $\frac{\text{opening trade creditors} + \text{closing trade creditors}}{2}$
(or)

Average trade creditors = $\frac{\text{Total purchases}}{\text{closing creditors}}$.

1) calculate creditor turnover ratio and debt payment period from the following information.

cash purchases - 1,00,000/-
 opening sundry creditors - 25,000/-
 closing sundry creditors - 30,000/-
 opening bills payable - 20,000/-
 closing bills payable - 25,000/-
 Total purchases - 407000/-
 purchase Returns - 7,000/-

$$\begin{aligned}
 \text{Credit Turn over Ratio} &= \frac{\text{Net credit purchases}}{\text{Average trade creditors.}} \\
 &= \frac{3,00,000}{50,000} \\
 &= 6 \text{ times.}
 \end{aligned}$$

$$\begin{aligned}
 \text{Net credit purchases} &= 40,7000 - 7000 - 1,00,000 \\
 &= 3,00,000.
 \end{aligned}$$

$$\begin{aligned}
 \text{Average creditors} &= \frac{\text{opening creditors} + \text{opening Bills Receivable} + \text{closing creditor} + \text{closing Bills Receivables.}}{2} \\
 &= \frac{25,000 + 20,000 + 30,000 + 25,000}{2} \\
 &= \frac{1,00,000}{2} \\
 &= 50,000.
 \end{aligned}$$

Creditors collection period

$$= \frac{365}{6}$$

$$= \frac{365}{6}$$

$$= 61 \text{ days}$$

4. profitability Ratio:-

$$\text{Gross profit Ratio} = \frac{\text{gross profit}}{\text{Net sales}} \times 100.$$

Where, gross profit = net sales - cost of goods sold.

$$\begin{aligned} * \text{ cost of goods sold} &= \text{opening stock} + \text{net purchases} \\ &+ \text{direct Expenses} - \text{closing stock} \end{aligned}$$

$$* \text{ Net sales} = \text{Total sales} - \text{Sales Returns}.$$

$$2) \text{ Net profit Ratio} = \frac{\text{Net profit}}{\text{Net sales}} \times 100.$$

$$3) \text{ operating Ratio} = \frac{\text{cost of goods sold} + \text{operating Expenses}}{\text{Net sales}} \times 100.$$

$$4) \text{ Operating profit Ratio} = \frac{\text{operating profits}}{\text{Net sales}} \times 100.$$

$$5) \text{ Expenses Ratio} = \frac{\text{Amount of Expenses}}{\text{Net sales}} \times 100.$$

6) Return on capital Employed =
$$\frac{\text{Net Income before Interest and tax}}{\text{capital Employed}}$$

7) Return on share holders Funds =
$$\frac{\text{Net profit after Interest and tax}}{\text{share holders Funds}} \times 100$$

where,

share holders Funds = Fixed Assests + current Assests - current and long term liabilities.

8) Earning per share :-

EPS =
$$\frac{\text{Net profit after tax, Interest and preference dividend}}{\text{No. of Equity shares}}$$

9) price Earning Ratio :-

(PE) Ratio =
$$\frac{\text{Market price per share}}{\text{Earnings per equity share}}$$

1) Trading and profit and loss A/c. of the Reliance company.

Dr

Cr

| particulars | Amount | particulars | Amount |
|----------------------------|----------|------------------|----------|
| To opening stock | 40,000 | By sales | 2,00,000 |
| To purchases | 1,00,000 | By closing stock | 20,000 |
| To gross profit | 80,000 | | |
| Total | 2,20,000 | | 2,20,000 |
| To Administrative Expenses | 15,000 | By gross profit | 80,000 |
| To selling Expenses | 20,000 | | |
| To Financial Expenses | 5,000 | | |
| To non-operating Expenses | 10,000 | | |
| To Net profit | 30,000 | | |
| Total | 80,000 | | 80,000 |

- calculate
- i) gross profit Ratio.
 - ii) Net profit Ratio.
 - iii) operating Ratio.
 - iv) operating profit Ratio.
 - v) cost of goods sold Ratio
 - vi) Administrative Expenses Ratio.
 - vii) Financial Ratio.

$$\begin{aligned}
 1. \text{ Gross profit Ratio} &= \frac{\text{Gross profit}}{\text{Net sales}} \times 100. \\
 &= \frac{80,000}{2,000,000} \times 100 \\
 &= 40\%.
 \end{aligned}$$

$$\begin{aligned}
 2. \text{ Net profit Ratio} &= \frac{\text{Net profit}}{\text{Net sales}} \times 100 \\
 &= \frac{30,000}{2,000,000} \times 100 \\
 &= 15\%
 \end{aligned}$$

$$\begin{aligned}
 3. \text{ Operating Ratio} &= \frac{\text{Cost of goods sold} + \text{Operating Expenses}}{\text{Net sales}} \times 100 \\
 &= \frac{2,000,000 - 80,000 + 12,000 + 15,000 + 20,000 + 5,000}{2,000,000} \times 100 \\
 &= 80\%.
 \end{aligned}$$

$$4. \text{ Operating profit Ratio} = \frac{\text{O.P.}}{\text{Net sales}} \times 100.$$

$$\begin{aligned}
 \text{O.P.} &= \text{Net sales} - \text{cost of goods sold} + \text{Admin. Exp} \\
 &\quad + \text{selling and distribution} + \\
 &\quad \text{Financial Expenses.}
 \end{aligned}$$

$$\begin{aligned}
 &= 2,000,000 - 1,200,000 + 15,000 + 20,000 + 5,000 \\
 &= 2,000,000 - 1,600,000 \\
 &= 400,000.
 \end{aligned}$$

$$= \frac{40,000}{2,00000} \times 100$$

$$= 20\%$$

O.P.R = 100 - operating Ratio.

$$= 100 - 80$$

$$= 20\%$$

5) cost of good sold Ratio = $\frac{\text{cost good sold}}{\text{Net sales}} \times 100.$

$$= \frac{2,00,000 - 80,000}{2,00,000}$$

$$= \frac{1,20,000}{2,00,000} \times 100$$

$$= 60\%$$

6) Administrative Expenses Ratio

$$= \frac{\text{A:d Expenses}}{\text{Net sales}} \times 100.$$

$$= \frac{15000}{200000} \times 100$$

$$= 7.5\%$$

7) Financial Ratio = $\frac{\text{Financial Expenses}}{\text{Net sales}} \times 100.$

$$= \frac{5000}{200000} \times 100$$

$$\begin{aligned} \text{Selling Expenses Ratio} &= \frac{\text{Selling Expenses}}{\text{Net sales}} \times 100 \\ &= \frac{20000}{200000} \times 100 \\ &= 10\% \end{aligned}$$

2) P, Q, R corporation has Earnings before Interest and tax. Rs 10,00,000, total Assets Rs 45,00,000 and current liabilities of Rs 1,00,000. calculate Return on capital Employed.

$$\text{Returns on capital Employed} = \frac{\text{Net Income before Interest and tax}}{\text{capital Employed}}$$

$$\begin{aligned} \text{capital Employed} &= \text{G.C} - \text{current liabilities} \\ &= 45,00,000 - 1,00,000 \\ &= 44,00,000 \end{aligned}$$

$$\begin{aligned} \text{R.O.C.E} &= \frac{1,0,00,000}{44,00,000} \times 100 \\ &= 22.72\% \end{aligned}$$

3) calculate Return on share holders Funds.

| Particulars | Amount |
|--|-----------------|
| I A) Net profit after Interest and tax | 4,40,000 |
| B) less: preference dividend (1,00,000 x $\frac{18}{100}$) | 18,000 |
| | <u>4,22,000</u> |

c) Net profit after interest, tax and preference dividend.

II calculation of Equity share holders Funds.

| | |
|--------------------------------|-------------------|
| 1) Net Fixed Assets | 12,00,000. |
| 2) Trade Investment | 1,00,000. |
| 3) current Assets | 4,40,000. |
| 4) Total Assets | 17,40,000. |
| less: current liabilities | 3,40,000. |
| Capital Employed | 14,00,000. |
| less: long term debt | ⇒ 8,00,000 |
| share holders Fund | ← <u>6,00,000</u> |
| less: preference share capital | ⇒ <u>1,00,000</u> |
| Equity share holders Funds | <u>5,00,000</u> |

Return on share holders Fund

$$= \frac{\text{Net profit After Interest and tax}}{\text{share holders Fund}}$$

$$= \frac{4,22,000}{5,00,000} \times 100$$

$$= 84.4\%$$

4) calculate Earning per share

1. 10,000 equity shares of Rs 10/- each
(10,000 x 10 = 1,00,000)

2) 1,00,000 , 10% preference share of Rs 10/- each
(10,000 x 10 = 1,00,000).

3) Net profit before paying dividend to preference shares 50,000/-

$$\text{Earning per share} = \frac{\text{net profit after dividend on preference shares}}{\text{No. of equity shares.}}$$

10,000 @ 10 = 1,00,000.

10,000 @ 10% Interest @ 10 = 1,00,000.

Net profit Before paying dividend to preference share = 50,000.

(-) preference Dividend

1,00,000 x $\frac{10}{100}$

= $\frac{10,000}{40,000}$

→ Net profit After paying preference. D.

= $\frac{40,000}{10,000}$

= 4/-

Price Earning Ratio:-

= Market price per share

Earning per Equity shares.

5) The capital of ABC Ltd. is as follows
80,000 equity shares of Rs 10/- = 8,00,000
10/-, 30,000 preference shares of each Rs 10/-
is, 3,00,000.

Net profit after tax at 60% is, 2,70,000/-

Depreciation = 60,000/-

Equity dividend paid = 20%.

Market price of equity shares Rs 40/-

price Earning = $\frac{\text{Market price per share}}{\text{Earning per Equity share}}$.

Equity preference share

= $\frac{\text{Net profit after dividend on preference shares}}{\text{No. of Equity shares}}$.

$$= \frac{2,70,000 - 30,000}{80,000}$$

= 3.

preference share dividend

preference share Divident =

$$30,00,000 \times \frac{10}{100}$$

$$= 30,000.$$

price Earning = $\frac{\text{Market price per share}}{\text{Earning per Equity shares.}}$

$$= \frac{40}{3}$$

$$= 13.3$$

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1st MBA.

IMPORTANT QUESTIONS

UNIT-4

- ✓ What is ratio analysis? Explain types of ratio with formulas?
- ✓ Importance (or) Advantages & disadvantages of Ratio analysis?
- ✓ What is financial analysis? Explain Du Pont chart analysis ?

Problems: RATIO ANALYSIS MOST IMPORTANT.



(17E00104) FINANCIAL ACCOUNTING FOR MANAGERS

The Objective of the course is to provide the basic knowledge of book keeping and accounting and enable the students to understand the Financial Statements and make analysis financial accounts of a company.

* **Standard discounting and statistical tables to be allowed in the examinations.**

1. **Introduction to Accounting:** Definition, Importance, Objectives, uses of accounting and book keeping Vs Accounting, Single entry and Double entry systems, classification of accounts – rules of debit & credit.
2. **The Accounting Process:** Overview, Books of Original Record; Journal and Subsidiary books, ledger, Trial Balance, Final accounts: Trading accounts- Profit & loss accounts- Balance sheets with adjustments, accounting principles.
3. **Valuation of Assets:** Introduction to Depreciation - Methods (Simple problems from Straight line method, Diminishing balance method and Annuity method). Inventory Valuation: Methods of inventory valuation (Simple problems from LIFO, FIFO, Valuation of goodwill - Methods of valuation of goodwill.
4. **Financial Analysis -I** Analysis and interpretation of financial statements from investor and company point of view, Liquidity, leverage, solvency and profitability ratios – Du Pont Chart -A Case study on Ratio Analysis
5. **Financial Analysis-II:** Objectives of fund flow statement - Steps in preparation of fund flow statement, Objectives of Cash flow statement- Preparation of Cash flow statement - Funds flow statement Vs Cash flow statement.

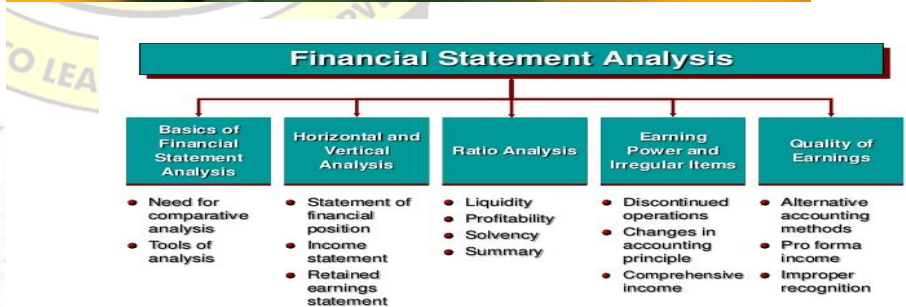
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- Accounting for Management , N.P.Srinivasan, & M.Shakthivel Murugan, S.Cha

I SEMESTER FINANCIAL ACCOUNTING FOR MANAGERS Unit-V FINANCIAL ANALYSIS -II



UNIT-5

FINANCIAL ANALYSIS – II

5.1. FUNDS FLOW STATEMENT

INTRODUCTION: The profit and loss account and the balance sheet are the two important financial statements of a business organization. The profit and loss account reports the revenues generated and expenses incurred during a particular period of time. The balance sheet contains information relating to assets and liabilities of an organization as on a particular date. Both the statements do not contain sufficient information to assess about the funds position of an organization by the users.

In order to analyze the fund movements in a business organization, it is necessary to prepare a statement which is known as “statement of sources and uses of funds” or simply funds flow statement. It is also called “statement of changes in financial position”.

5.1.1 Concept of fund: It refers to all the financial resources of the company, which includes cash, and equivalents

Fund means working capital. **Working capital=current Assets –current Liabilities**

*The excess of current assets over current liabilities is called working capital.

Flow: It refers to the statement of sources and applications.

5.1.2 Flow to fund: the flow of fund refers to transfer of economic values from one asset equity to another. When fund means working capital, flow of funds refers to movement of funds which cause a change in working capital of an organization. To understand, the concept of flow of funds we have to first of all be clear about the difference between current and non-current assets.

5.1.3 Meaning and definition of funds flow statement:

As the name implies statement of sources and uses of funds depicts the sources from which funds are obtained and uses to which they are put.

According to Foulke defined funds flow statement as “A statement of sources and application of funds is a technical device designed to analyze the changes in the financial conditions of a business enterprise between two dates”.

Funds flow statement_ a statement prepared to ascertain the increase/ decrease in various items of fixed assets, long term liabilities and share capital between two balance sheet dates

5.1.4. OBJECTIVES, USES, SIGNIFICANCE OF FUND FLOW STATEMENT:

A funds flow statement is an essential tool for the financial analysis and its primary objective is to the financial management. Now-a-days, it is being widely used by the financial

analysis, credit granting institutions and financial managers. The basic purpose of a funds flow statement is to reveal the changes in the working capital on the two balance sheet dates .It also describes the sources from which additional working capital has been financed and the uses to which working capital has been applied . Such a statement is particularly useful in ascertaining the growth on the firm, its resulting financial needs and in determining the best way of financing these needs. By making use of projected funds flow statements, the management can come to know the adequacy or inadequacy of working capital even in advance. One can plan the intermediate and long-term financing of the firm, repayment of long – term debts expansion of the business, allocation of resources, etc.

1. Fund flow statement reveals clearly the changes in items of financial position between two different balance sheet dates showing clearly the different sources and applications of funds. Thus, it summarizes the financing and investing activities of the enterprise.

2. It also reveals how much of the total funds is being collected by disposing of fixed assets, how much from issuing shares or debentures, how much from long-term or short-term loans, and how much from normal operational activities of the business.

3. It also provides information about the specific utilization of such funds i.e., how much has been used for acquiring fixed assets, how much for redemption of preference shares, debentures or short-term loans as well as payment of tax, dividend etc.

4. It helps the management in depicting all inflows and outflows of funds which cause a change in working capital of a business organisation.

5. The projected fund flow statement helps management to exercise budgetary control and capital expenditure control in the enterprise.

6. The financial statements reveal the net effect of various transactions on the operational and financial position of a concern. The balance sheet gives a static view of the resources of a business and the uses to which these resources of a business and the uses to which these resources have been put at a certain point of time. But it does not disclose the causes for changes in the assets and also the effect of these changes on the liquidity position of the economy. Sometimes a concern may operate profitably and yet its cash position may become more and worse. The funds flow statement gives a clear answer to situation explaining what has happened to, the profits of the profits of firm.

It throws light on many perplexing questions of general interest which otherwise may be answered, such as

(a) Why were the net current assets lesser in spite of higher profits and vice-versa?

b) Why more dividends could not be declared in spite of available profits?

c) How was it possible to distribute more dividends than the present earnings?

- d) What happened to the net profit? Where did they go?
- e) What happened to the proceeds of sale of fixed assets or issue of shares, debentures, etc?
- f) What are the sources of repayment of debt?
- g) How was the increase in working capital financed and how will it be financed in future?
7. Sometimes a firm has sufficient profits available for distribution as dividend but yet it may not be advisable to distribute dividend for lack of liquid or cash resources. In such cases, a funds flow statement helps in the formation of a realistic dividend policy.
8. The resources of a concern are always limited and it wants to make the best use of these resources. A projected funds flow statement constructed for the future helps in making managerial decisions. The firm can plan the deployment of its resources and allocate them among various applications.
9. The projected funds flow statement also act as a guide for future to the management. The management can come to know the various problems it is going to face in near future for want of funds. The firm's future needs of funds can be projected well in advance and also the timing of these needs. The firm can arrange to finance these needs more effectively and avoid future problems.
10. The funds flow statement helps in explaining how efficiently the management has used its working capital and also suggests way to improve working capital position of the firm.
11. the financial institutions and banks such as State financial institutions industrial development corporation, industrial finance corporation of India, Industrial development bank of India, etc., all ask for funds flow statement constructed for a number of year before granting loans to know the credit worthiness and paying capacity of the firm. Hence, a firm seeking financial assistance from these institutions has no alternative but to prepare funds flow statements.

5.1.5. LIMITATIONS OF FUNDS FLOW STATEMENTS:

- 1) It should be remembered that a funds flow statement is not a substitute of an income statement or a balance sheet. It provides only some additional information as regards changes in working capital.
- 2) It is not original statement but simply re-arrangement of data given in the financial statement.
- 3) It is essentially historic in nature and projected funds flow statement can't be prepared with much accuracy. Changes in cash are more important and relevant for financial management than the working capital.

NOTE: The term 'financial analysis' includes both 'analysis and interpretation'.

5.2. STEPS IN PREPARATION OF FUNDS FLOW STATEMENT:

- a) Statement of changes in working capital
- b) Statement of Sources and Uses of funds

a) Statement of changes in working capital: the primary objective of this statement is to arrive at the net change in working capital between the dates of two balance sheets which should be shown in the funds flow statement. The increase in working capital between the two balance sheet dates is treated as use of fund and the decrease in working capital is treated as sources of funds.

The statement finally discloses the difference in working capital at the end of two years either as an increase or decrease in working capital. While, ascertaining the increase or decrease in individual items of current assets and current liabilities and its impact on working capital the following rules are to be observed:

- Increase in the items of current assets will increase the working capital.
- Decrease in the items of current assets will decrease the working capital.
- Increase in the items of current liabilities will decrease the working capital.
- Decrease in the working of current liabilities will increase the working capital.

Note: we observe that there is positive relationship between current assets and working capital. On other hand, there is an inverse relationship between changes in current liabilities and working capital

PROFORMA OF STATEMENT OF CHANGES IN WORKING CAPITAL

| Particulars | Beginning of the year | End of the year | Changes in working capital | |
|---|------------------------|------------------------|----------------------------|------------------------|
| | | | Increase(+) | Decrease(-) |
| <u>Current Assets :</u> | | | | |
| Cash | | | | |
| Cash at Bank | | | | |
| Bills Receivable | | | | |
| Debtors | | | | |
| Stock | | | | |
| Short-term investments | | | | |
| Prepaid Expenses | | | | |
| Other Current Assets | | | | |
| Total Current Assets(A) | XXX | XXX | | |
| <u>Current Liabilities:</u> | | | | |
| Creditors | | | | |
| Bills payable | | | | |
| Outstanding Expenses | | | | |
| Bank Overdraft | | | | |
| Short-term Loans | | | | |
| Proposed dividend | | | | |
| Provision for taxation | | | | |
| Other Current Liabilities | | | | |
| Total Current liabilities(B) | XXX | XXX | | |
| Working capital (C) (current Assets-Current Liabilities) C=A-B | XXX | XXX | | |
| Net Increase (Or) Decrease in working capital | XXX¹ | XXX² | XXX² | XXX¹ |
| Total | XXX | XXX | XXX | XXX |

Note: 1 and 2 denote net increase and net decrease in working capital respectively.

b) statement of sources and uses funds/funds flow statement: This is the second but most important step in the preparation of funds flow statement. It is prepared on the basis of changes in fixed assets, share capital and long term liabilities that took place between the dates of two balance sheets. If any additional information is available it must also be considered.

Increase in fixed assets is use of funds and decrease in fixed assets in sources of fund (On account of sale only and not on account of depreciation or writing off the values of assets).

Increase in long term liabilities is a source of fund and decrease in long term liabilities is use of fund (including share capital). The following is the format of statement of sources and Application of funds with the probable items of sources and uses of funds.

PROFORMA OF FUNDS FLOW STATEMENT

| Sources | Amount | Applications | Amount |
|---|------------|--|------------|
| Funds from operation | XXX | Funds lost in operation | XXX |
| Issue of share capital | XXX | Redemption of preference share capital | XXX |
| Issue of debentures | XXX | Redemption of Debentures | XXX |
| Raising long-term loan | XXX | Repayment of long term loans | XXX |
| Receipt from party paid shares, called up | XXX | Purchase of fixed assets | XXX |
| Sale of fixed assets | XXX | Purchase of long-term investments | XXX |
| Non-trading receipts such as dividend | XXX | Non-Trading payments | XXX |
| Sale of long term investments | XXX | Payment of dividend | XXX |
| Net decrease in working capital | XXX | Payment of tax | XXX |
| Total | XXX | Total | XXX |

***Note:** These two items appear as an application of funds only when these items are treated as non-current liability.

5.2.1 FUNDS FROM TRADING ACTIVITIES OF OPERATING PROFIT:

The profit or loss disclosed by profits and loss account doesn't indicate the funds generate by trading activities, because it contains a variety of write offs and adjustments, which do not involve any corresponding movement of funds. Therefore appropriate adjustments are to be making to loss as arrive at the funds from business operations. For this purpose items debited to profit, which do not belong trading activities.

Operating profit = Net profit + Non –operating Expenses – Non –operating Income

CALCULATION OF FUNDS FROM OPERATIONS

| Particulars | Amount Rs. | Amount Rs. |
|--|------------|------------|
| Net profit | XXX | |
| <u>Add:</u> Non –Operating items debited to P&L a/c | | |
| Depreciations | XXX | |
| Write off depreciation on non tangible assets | XXX | |
| Discount on issue of share and debentures | XXX | |
| Loss on sale of non current assets | XXX | |
| Provision for income tax | XXX | |
| Proposed dividend | XXX | |
| All transfers to reserves | XXX | |
| Provision for doubtful debts | XXX | |
| | XXX | XXX |
| <u>Less:</u> Non operating terms credited to P&L a/c | | XXX |
| Profit on sale of Non –current assets | | XXX |
| Dividend and interest received | | XXX |
| Non –operating income | | XXX |
| Gain on evaluation of non – current assets | | XXX |
| Funds from Operations | | XXX |

Schedule of changes in Working Capital :

This statement is prepared from the current items of Balance Sheet, i.e., current assets and current liabilities in order to calculate the increase or decrease in working capital. Non-current items are ignored as working capital is the difference between current assets and current liabilities. In order to know whether there is an increase or decrease in working capital, the following rules must be followed :

1. An increase in a current asset between two Balance Sheet dates results in an increase in the working capital and a decrease in a current asset would result in a decrease in working capital.
2. An increase in a current liability, between two Balance Sheet dates, decreases working capital whereas a decrease in a current liability would increase the working capital.

The following illustrations will make the above rules clear.

Illustration 1 :

Prepare a schedule of changes in working capital from the given consolidated Balance Sheet.

| <i>Liabilities</i> | 31.03.08 | 31.03.09 | <i>Assets</i> | 31.03.08 | 31.03.09 |
|---------------------|-----------------|-----------------|----------------|-----------------|-----------------|
| | ₹ | ₹ | | ₹ | ₹ |
| Share Capital | 80,000 | 95,000 | Fixed Assets | 90,000 | 1,00,000 |
| Reserves | 20,000 | 25,000 | Current Assets | 30,000 | 50,000 |
| Current Liabilities | 20,000 | 30,000 | | | |
| | <u>1,20,000</u> | <u>1,50,000</u> | | <u>1,20,000</u> | <u>1,50,000</u> |
| | ----- | ----- | | ----- | ----- |

Schedule of Changes in Working Capital

| <i>Particulars</i> | 31.03.08 ₹ | 31.03.09 ₹ | <i>Change in Working Capital</i> | |
|-----------------------------|---------------|---------------|----------------------------------|--------------------------|
| | | | <i>Increase (+)</i> ₹ | <i>Decrease (-)</i> ₹ |
| Current Assets | 30,000 | 50,000 | 20,000 | -- |
| Current Liabilities | 20,000 | 30,000 | -- | 10,000 |
| | | | <u>20,000</u> | <u>10,000</u> |
| Increase in Working Capital | | | -- | 10,000 |
| | | | <u>20,000</u> | <u>20,000</u> |

Note : Though there is an increase in both current assets and current liabilities, the increase in current assets is more than the increase in current liabilities, thus resulting in an increase in working capital.

Illustration 2 :

The following are the particulars of A Ltd. for 31.03.08 and 31.03.09.

| <i>Particulars</i> | 31.03.08 | 31.03.09 |
|---------------------|------------------|-----------------|
| | ₹ | ₹ |
| Fixed Assets | 5,90,000 | 5,20,000 |
| Current Assets | 4,10,000 | 3,80,000 |
| | <u>10,00,000</u> | <u>9,00,000</u> |
| Equity Capital | 5,00,000 | 5,00,000 |
| Reserves | 2,75,000 | 2,00,000 |
| Current Liabilities | 2,25,000 | 2,00,000 |
| | <u>10,00,000</u> | <u>9,00,000</u> |

Prepare a statement of changes in working capital.

Solution :**Schedule of changes in working capital**

| <i>Particulars</i> | 31.03.08 ₹ | 31.03.09 ₹ | <i>Change in Working Capital</i> | |
|-----------------------------|---------------|---------------|----------------------------------|--------------------------|
| | | | <i>Increase (+)</i> ₹ | <i>Decrease (-)</i> ₹ |
| Current Assets | 4,10,000 | 3,80,000 | -- | 30,000 |
| Current Liabilities | 2,25,000 | 2,00,000 | 25,000 | -- |
| | | | <u>25,000</u> | <u>30,000</u> |
| Decrease in Working Capital | | | 5,000 | -- |
| | | | <u>30,000</u> | <u>30,000</u> |

Illustration 3 :

The following are the summarized balance sheets of X and Y Co., as on 31.03.08 and 31.03.09.

Balance Sheets

| <i>Particulars</i> | 31.03.08 | 31.03.09 | <i>Particulars</i> | 31.03.08 | 31.03.09 |
|-----------------------|-----------------|-----------------|--------------------|-----------------|-----------------|
| | ₹ | ₹ | | ₹ | ₹ |
| Capital : | | | | | |
| Equity Shares | 80,000 | 80,000 | Fixed Assets | 60,000 | 50,000 |
| Preference Shares | -- | 20,000 | Debtors | 80,000 | 48,000 |
| General Reserve | 4,000 | 4,000 | Stocks | 20,000 | 70,000 |
| Profit & Loss Account | 8,000 | 10,800 | Prepaid expenses | 2,600 | 1,000 |
| Debentures | 22,000 | 25,600 | Cash | 400 | 7,000 |
| Creditors | 24,000 | 26,000 | | | |
| Bank Overdraft | 25,000 | 9,600 | | | |
| | <u>1,63,000</u> | <u>1,76,000</u> | | <u>1,63,000</u> | <u>1,76,000</u> |

You are required to prepare a schedule showing changes in working capital.

Solution :

Schedule of changes in Working Capital

| Particulars | 31.03.08 ₹ | 31.03.09 ₹ | Changes in Working Capital | |
|-----------------------------|---------------|---------------|----------------------------|-------------------|
| | | | Increase (+) ₹ | Decrease (-) ₹ |
| Current Assets | | | | |
| Debtors | 80,000 | 48,000 | -- | 32,000 |
| Stocks | 20,000 | 70,000 | 50,000 | -- |
| Prepaid Expenses | 2,600 | 1,000 | -- | 1,600 |
| Cash | 400 | 7,000 | 6,600 | -- |
| Current Liabilities | | | | |
| Creditors | 24,000 | 26,000 | -- | 2,000 |
| Bank Overdraft | 25,000 | 9,600 | 15,400 | -- |
| | | | 72,000 | 35,600 |
| Increase in Working Capital | | | -- | 36,400 |
| | | | 72,000 | 72,000 |

The preparation of Schedule of changes in Working Capital, to ascertain the increase or decrease in working capital between two Balance Sheet dates, constitutes the first step in the preparation of Fund Flow Statement on working capital basis. The remaining two steps are (a) ascertaining funds from operations and (b) preparation of Funds Flow Statement.

Sources and Application of Funds :

'Funds' are interpreted, to mean Working Capital (Net Working Capital). As net working capital is excess of current assets over current liabilities, funds represent that portion of current assets which are not financed by current liabilities (i.e., financed from the long-term/Non-current sources).

Sources of Funds :

The sources of funds can be classified as external sources and internal sources. External sources of funds are those sources which are raised from outside the business, to augment the funds. The external sources are (a) additional capital raised (b) increase in long term borrowings.

As opposed to external sources, internal sources consist of resources raised within the organization internally. Every profitable sale brings in funds in excess of the cost of goods sold. Thus, profit generated by the business is an important internal source of funds. In determining profit, revenues during the period are matched against the expenses, whether involves the use of funds or not, during the current period. Thus, the amount of profit requires adjustment in respect of transactions that do not involve the use of funds - e.g., Depreciation, amortization of expenses etc.

Surplus or worn out assets could be sold and this also constitutes an internal source of funds.

Illustration 5 :

Prepare a Funds Flow Statement from the following information.

Comparative Balance Sheet

| | 31-03-08 | 31-03-09 | | 31-03-08 | 31-03-09 |
|---------------------------------------|----------|----------|-----------------|----------|----------|
| | ₹ | ₹ | | ₹ | ₹ |
| Capital | 80,000 | 1,00,000 | | | |
| Reserves | 30,000 | 45,000 | Fixed Assets: | | |
| Accumulated Depreciation on Machinery | 10,000 | 15,000 | Machinery | 60,000 | 70,000 |
| | | | Furniture | 40,000 | 40,000 |
| Current Liabilities: | | | Current Assets: | | |
| Creditors | 25,000 | 30,000 | Stocks | 20,000 | 30,000 |
| Bills Payable | 10,000 | 2,000 | Debtors | 15,000 | 25,000 |
| Expenses Payable | 20,000 | 8,000 | Cash | 40,000 | 35,000 |
| | ----- | ----- | | ----- | ----- |
| | 1,75,000 | 2,00,000 | | 1,75,000 | 2,00,000 |
| | ----- | ----- | | ----- | ----- |

Net profit for the year ₹ 15,000.

Solution :

Schedule of Changes in Working Capital

| | 31-03-08 | 31-03-09 | Changes in Working Capital | |
|-----------------------------|----------|----------|----------------------------|--------------|
| | | | Increase (₹) | Decrease (₹) |
| Current Assets: | | | | |
| Stocks | 20,000 | 30,000 | 10,000 | --- |
| Debtors | 15,000 | 25,000 | 10,000 | --- |
| Cash | 40,000 | 35,000 | --- | 5,000 |
| Current liabilities: | | | | |
| Creditors | 25,000 | 30,000 | --- | 5,000 |
| Bills Payable | 10,000 | 2,000 | 8,000 | --- |
| Expenses Payable | 20,000 | 8,000 | 12,000 | --- |
| Increase in Working Capital | | | 40,000 | 10,000 |
| | | | --- | 30,000 |
| | | | 40,000 | 40,000 |

| Dr. | | Accumulated Depreciation Account | | Cr. | |
|----------------|--------|----------------------------------|--|-----|--------|
| | ₹ | | | | ₹ |
| | | By Balance b/d | | | 10,000 |
| | | By Depreciation Charged | | | 5,000 |
| To Balance c/d | 15,000 | (Balancing Figure) | | | |
| | 15,000 | | | | 15,000 |

| Dr. | | Machinery Account | | Cr. | |
|--------------------|--------|-------------------|--|-----|--------|
| | ₹ | | | | ₹ |
| To Balance b/d | 60,000 | By Balance c/d | | | 70,000 |
| To Cash Purchases | 10,000 | | | | |
| (Balancing Figure) | | | | | |
| | 70,000 | | | | 70,000 |

| Dr. | | Share Capital Account | | Cr. | |
|----------------|----------|-----------------------|--|-----|----------|
| | ₹ | | | | ₹ |
| To Balance c/d | 1,00,000 | By Balance b/d | | | 80,000 |
| | | By Cash | | | 20,000 |
| | | (Balancing Figure) | | | |
| | 1,00,000 | | | | 1,00,000 |

| Dr. | | Reserves Account | | Cr. | |
|----------------|--------|------------------|--|-----|--------|
| | ₹ | | | | ₹ |
| To Balance c/d | 45,000 | By Balance b/d | | | 30,000 |
| | | By Net Profit | | | 15,000 |
| | 45,000 | | | | 45,000 |

Funds from Operations

| | |
|---------------------------|----------|
| Net Profit | ₹ 15,000 |
| Add: Depreciation Charged | 5,000 |
| Funds from Operations | 20,000 |

Funds Flow Statement for the year ended 31-03-2009

| | ₹ |
|-----------------------------|---------------|
| A. Sources : | |
| Funds from Operations | 20,000 |
| Issue of Share Capital | 20,000 |
| | <u>40,000</u> |
| B. Applications : | |
| Purchase of Machinery | 10,000 |
| Increase in Working Capital | 30,000 |
| | <u>40,000</u> |

Illustration 7 :

From the following Balance Sheets, prepare Funds Flow Statement.

Comparative Balance Sheet

| | 31-03-08 ₹ | 31-03-09 ₹ | | 31-03-08 ₹ | 31-03-09 ₹ |
|------------------------------|-----------------|-----------------|-----------------------------|-----------------|-----------------|
| Share capital | 90,000 | 1,10,000 | Land | 80,000 | 1,00,000 |
| Profit and Loss A/c | 80,000 | 95,000 | Plant and Machinery | 40,000 | 66,000 |
| General Reserve | 40,000 | 50,000 | Current Assets : | | |
| Current Liabilities : | | | Stocks | 40,000 | 60,000 |
| Creditors | 51,000 | 25,000 | Debtors | 40,000 | 35,000 |
| Provision for Doubtful Debts | | | Cash | 50,000 | 20,000 |
| Debts | 4,000 | 2,000 | Preliminary Expenses | 25,000 | 15,000 |
| Bills Payable | 20,000 | 18,000 | Discount on Issue of Shares | 10,000 | 4,000 |
| | <u>2,85,000</u> | <u>3,00,000</u> | | <u>2,85,000</u> | <u>3,00,000</u> |

Solution :

Schedule of Changes in Working Capital

| | 31-03-08 ₹ | 31-03-09 ₹ | Changes in Working Capital | |
|------------------------------|---------------|---------------|----------------------------|---------------|
| | | | Increase (₹) | Decrease (₹) |
| Current Assets: | | | | |
| Stocks | 40,000 | 60,000 | 20,000 | -- |
| Debtors | 40,000 | 35,000 | -- | 5,000 |
| Cash | 50,000 | 20,000 | -- | 30,000 |
| Current Liabilities: | | | | |
| Creditors | 51,000 | 25,000 | 26,000 | -- |
| Provision for Doubtful Debts | 4,000 | 2,000 | 2,000 | -- |
| Bills Payable | 20,000 | 18,000 | 2,000 | -- |
| | | | <u>50,000</u> | <u>35,000</u> |
| Increase in Working Capital | | | -- | 15,000 |
| | | | <u>50,000</u> | <u>50,000</u> |

| Dr. | Land Account | | Cr. |
|--------------------|-----------------|----------------|-----------------|
| | ₹ | | ₹ |
| To Balance b/d | 80,000 | By Balance c/d | 1,00,000 |
| To Bank | <u>20,000</u> | | |
| (Balancing Figure) | <u>1,00,000</u> | | <u>1,00,000</u> |

| Dr. | | Preliminary Expenses Account | | Cr. | |
|----------------|---------------|--|--|-----|---------------|
| | ₹ | | | | ₹ |
| To Balance b/d | 25,000 | By P & L Account (Balancing Figure) | | | 10,000 |
| | | By Balance c/d | | | <u>15,000</u> |
| | <u>25,000</u> | | | | <u>25,000</u> |

| Dr. | | Machinery Account | | Cr. | |
|--|---------------|-------------------|--|-----|---------------|
| | ₹ | | | | ₹ |
| To Balance b/d | 40,000 | | | | |
| To Cash A/c (Purchase) (Balancing Figure) | <u>26,000</u> | By Balance c/d | | | <u>66,000</u> |
| | <u>66,000</u> | | | | <u>66,000</u> |

| Dr. | | Discount on Issue of Shares Account | | Cr. | |
|----------------|---------------|--|--|-----|---------------|
| | ₹ | | | | ₹ |
| To Balance b/d | 10,000 | By P & L Account (Balancing Figure) | | | 6,000 |
| | | By Balance c/d | | | 4,000 |
| | <u>10,000</u> | | | | <u>10,000</u> |

| Dr. | | General Reserve Account | | Cr. | |
|----------------|---------------|--|--|-----|---------------|
| | ₹ | | | | ₹ |
| | | By Balance b/d | | | 40,000 |
| To Balance c/d | 50,000 | By P & L Account (Balancing Figure) | | | 10,000 |
| | <u>50,000</u> | | | | <u>50,000</u> |

| Dr. | | Adjusted Profit and Loss Account | | Cr. | |
|-------------------------|-----------------|--|--|-----|-----------------|
| | ₹ | | | | ₹ |
| To Preliminary Expenses | 10,000 | By Balance b/d | | | 80,000 |
| To Discount on Shares | 6,000 | | | | |
| To General Reserve | 10,000 | By Funds From Operations (Balancing Figure) | | | 41,000 |
| To Balance c/d | <u>95,000</u> | | | | <u>1,21,000</u> |
| | <u>1,21,000</u> | | | | <u>1,21,000</u> |

| Funds Flow Statement for the year ended 31-03-2009 | |
|--|---------------|
| | ₹ |
| A. Sources | |
| Funds from Operations | 41,000 |
| Issue of Shares (1,10,000 - 90,000) | <u>20,000</u> |
| | <u>61,000</u> |
| B. Application | |
| Purchase of Land | 20,000 |
| Purchase of Machinery | <u>26,000</u> |
| | <u>46,000</u> |
| Increase in Working Capital (A - B) | 15,000 |

Illustration 8.

5.3. CASH FLOW STATEMENT

Introduction and meaning: Cash plays very important role in the entire economic life of a business. Cash flow statement provides information about the cash receipts and payments of a firm for a given period of time. This statement provides useful information which compliments profit and Loss Account and Balance Sheet. Based on the information about the cash flows of the firm, it is possible to assess the ability of the firm to generate cash and cash equivalents and the firm to utilize these cash flows.

A firm needs cash to make payments to its supplies, to incur day to day expenses and to pay salaries, wages, interests and dividend etc., It is very essential for a business to maintain an adequate balance of cash.

3.1 Definition: ‘A statement of changes in the financial position of firm on cash basis is called a cash flow statement’.

A cash flow statement summarizes the causes of changes in cash position of business enterprises between dates of two balance sheets. It is called a cash flow out flow (uses) of cash.

5.3.2 OBJECTIVES OF CASH FLOW STATEMENT

(a) Measurement of Cash: Inflows of cash and outflows of cash can be measured annually which arise from operating activities, investing activities and financial activities.

(b) Generating Inflow of Cash: Timing and certainty of generating the inflow of cash can be known which directly helps the management to take financing decisions in future.

(c) Classification of Activities: All the activities are classified into: operating activities, investing activities and financial activities which help a firm to analyze and interpret its various inflows and outflows of cash.

(d) Prediction of Future: A Cash Flow Statement, no doubt, forecasts the future cash flows which helps the management to take various financing decisions since synchronization of cash is possible.

(e) Assessing Liquidity and Solvency Position: Both the inflows and outflows of cash and cash equivalent can be known, and, as such, liquidity and solvency position of a firm can also be maintained as timing and certainty of cash generation is known, i.e. it helps to assess the ability of a firm to generate cash.

(f) Evaluation of Future Cash Flows: Whether the cash flow from operating activities are quite sufficient in future to meet the various payments e.g. payment of expenses/debts/dividends/taxes.

(g) Supply Necessary Information to the Users: A Cash Flow Statement supplies various information relating to inflows and outflows of cash to the users of accounting information in the following ways:

(i) To assess the ability of a firm to pay its obligations as soon as it becomes due;

(ii) To analyze and interpret the various transactions for future courses of action;

(iii) To see the cash generation ability of a firm;

(iv) To ascertain the cash and cash equivalent at the end of the period.

(h) Helps the Management to Ascertain Cash Planning: No doubt a cash flow statement helps the management to prepare its cash planning for the future and thereby avoid any unnecessary trouble.

5.4. PREPARATION OF CASH FLOW STATEMENT:

The cash flows shown in the statement are grouped in to three main categories of cash inflows and cash outflows viz., Cash flows from operating activities , cash flows investing activities and cash flows from financing activities. A brief description of these items is discussed below:

A) Cash flows from operating activities

B) Cash flows from investing activities

C) Cash flows from financing activities

A) CASH FLOWS OPERATING ACTIVITIES: Operating activities of a firm are the main revenue producing activities of the firm and other activities that are not investing and financial activities. Operating activities include cash effects of those transactions and events that enter into the determination of net profit or loss. Following are the items which generate cash flows from operating activities of a firm.

- i) Cash receipts from the sale of goods and the rendering of services.
- ii) Cash receipts from royalties, fees, commission, and other revenue.
- iii) Cash payments to suppliers for goods and services.
- iv) Cash payments to and on behalf of employees.
- v) Cash receipts and payments of an insurance enterprise for premium and claims, annuities and other policy benefits.
- vi) Cash payments or refunds of income – taxes unless they can be specifically identified with financing and activities.
- vii) Cash receipts and payments relating to future contracts , forward contracts , options contracts , and swap contracts when the contracts are held for dealing or trading purpose,etc.,

Calculation of cash from operations (traditional method)

| Particulars | Amount | Amount |
|---|--------|------------|
| Funds from operations | | |
| Add: Increase in Current liabilities(excluding bank overdraft) | XXX | XXX |
| Decrease in current assets(excluding cash and bank balances) | XXX | XXX |
| Less: Increase in current assets(excluding cash and bank balances) | XXX | XXX |
| Decrease in current liabilities(excluding bank overdraft) | XXX | XXX |
| Cash from operations | | XXX |

B) CASH FLOW FROM INVESTING ACTIVITIES: Investing activities include acquisition and disposal of long term assets and other investments which are not included in cash equivalents. Investing activities include transactions that involve the purchase and sale of long-term assets such as land and buildings, plant and machinery etc., which are not held for re-sale and other investment purpose. Following are the items of cash flows arising from investing activities.

- i) Cash payments to acquire fixed assets(including intangibles) these payments include those relating to capitalized research and development costs and self-constructed fixed assets.
- ii) Cash receipts from disposal of fixed assets(including intangibles)
- iii) Cash payments to acquire shares, warrants, or debt instruments of other enterprises and interest in joint ventures (other than payments for those instruments considered to be cash equivalents and those held for dealing or trading purpose)

- iv) Cash receipts from disposal of shares, warrants or debt instruments of other enterprises and interest in joint ventures (other than receipts from those instruments considered to be cash equivalents and those held for dealing or trading purposes)
- v) Cash advances and loans made to third parties (other than advances and loans made by a financial enterprise).
- vi) Cash receipts and payments relating to future contracts, forward contracts, option contracts, and swap contracts except when the contracts are held for dealing or trading purposes.

C) CASH FLOWS FROM FINANCING ACTIVITIES: Financing activities are those activities that result in changes in the sizes and composition of owner's capital and borrowings of a firm. Following are the items of cash flows arising from financial activities:

- i) Cash proceeds from issuing of shares
- ii) Cash proceeds from issuing of debentures, loans, bonds and other short-term borrowings.
- iii) Cash repayments of borrowings
- iv) Payment of dividend.

5.4.1 USES OF CASH FLOWS STATEMENT:

- i) Cash flow statement helps efficient cash management. A projected cash flow statement enables the management to plan and co-ordinate the financial operations of a business efficiently.
- ii) The cash flow analysis helps the management in exploring possibility of repayments of long-term debts. The cash flow statement discloses the increase or decrease in cash and reasons thereof.
- iii) A comparison between actual and budget cash flow statement discloses the failure or success of the management in managing cash resources and necessary remedial measures to be taken in case of deviation.
- iv) Projected cash flow statement helps the management to determine the estimate the likely inflows and outflows of cash operations and the amount of cash to be raised from other sources for the future needs of the firm.
- v) Cash flow analysis supplements the analysis provided by funds flow statement.

5.4.2 LIMITATIONS OF CASH FLOW STATEMENT:

- i) It is difficult to precisely define the term 'cash'. There are controversies over a number of items like stamps, postal orders to be included in cash.
- ii) A cash flow statement reveals the inflow and outflow of cash but the exclusion of near cash items from cash obscures the true reporting of the firm's liquidity position.
- iii) Working capital being a wider concept of funds, a funds flow statement present a more complete picture than cash flow statement.

2. Cash Flow Analysis is more useful as a tool in short range planning whereas Funds Flow Analysis is more useful in long range planning.
3. An increase in a current liability or a decrease in a current asset (other than cash) will result in an increase in cash. Whereas, such changes will result in decrease in working capital. Similarly, a decrease in a current liability or an increase in a current asset (other than cash) will result in a decrease in cash, whereas such changes would increase the working capital.

Procedure for preparing a Cash Flow Statement :

Cash Flow Statement is not a substitute of Income Statement, i.e., a Profit and Loss Account, and a Balance Sheet. It provides additional information and explains the reasons for changes in cash and cash equivalents, derived from Financial Statements at two points of time. The procedure for preparing a Cash Flow Statement is different from the procedure followed in respect of Profit and Loss Account and Balance Sheet. It is prepared with the help of Financial Statements. **The basic information required for the preparation of a Cash Flow Statement is obtained from the following three sources :**

- (i) Comparative Balance Sheets at two points of time, i.e. in the beginning and at the end of the accounting period.
- (ii) Income Statement of the current accounting period or the Profit and Loss Account.
- (iii) Some selected additional data to extract the hidden transactions.

The preparation of a Cash Flow Statement involves the following steps :

- Step 1.** Compute the net increase or decrease in cash and cash equivalents by making a comparison of these accounts given in the comparative Balance Sheets.
- Step 2.** Calculate the net cash flow provided from (used in) Operating Activities by analyzing the Profit and Loss Account, Balance Sheet and Additional Information. There are two methods of converting net income into net cash flows from Operating Activities : the Direct Method and the Indirect Method.
- Step 3.** Calculate the net cash flow from Investing Activities (Cash Inflows - Cash Outflows).
- Step 4.** Calculate the net cash flow from Financing Activities (Cash Inflows - Cash Outflows).
- Step 5.** Prepare a formal Cash Flow Statement highlighting the net cash flow from (used in) Operating, Investing and Financing Activities separately.
- Step 6.** Make an aggregate of net cash flows from the above three activities and ensure that the total net cash flow is equal to the net increase or decrease in cash and cash equivalents as calculated in Step 1.
- Step 7.** Report significant non-cash transactions that did not involve cash or cash equivalents in a separate schedule to the Cash Flow Statement e.g., purchase of Machinery against issue of share capital or redemption of debentures in exchange for share capital.

Illustration 2 :

From the following information prepare a Cash Flow Statement of XYZ Ltd for the year ended 2007. (Direct Method)

Balance sheet (₹ in '000)

| <i>Liabilities</i> | <i>March</i> | <i>March</i> | <i>Assets</i> | <i>March</i> | <i>March</i> |
|--------------------------|--------------|--------------|---------------------------------|--------------|--------------|
| | 2006 | 2007 | | 2006 | 2007 |
| | (₹) | (₹) | | (₹) | (₹) |
| Issued & paid up Capital | 2,000 | 2,000 | Long-term Assets (Net) | 1,500 | 2,500 |
| Profit & Loss A/c | 200 | 250 | Closing stock | 400 | 800 |
| Mortgage Loan | --- | 1,000 | Prepaid Administrative Expenses | 100 | 200 |
| Tax unpaid | 50 | 100 | Trade Debtors | 200 | 250 |
| Trade Creditors | 500 | 1,000 | Cash | 550 | 600 |
| | 2,750 | 4,350 | | 2,750 | 4,350 |

Statement of Profit for the year ended March 31, 2007 (₹ in '000)

| <i>Particulars</i> | <i>Rs.</i> | <i>Rs.</i> |
|--|------------|------------|
| Sales | | 5,000 |
| Opening Stock | 400 | |
| Add: Purchase | 3,500 | |
| | 3,900 | |
| <u>Less: Closing stock</u> | 800 | |
| Cost of Goods Sold | 3,100 | 3,100 |
| Gross profit | | 1,900 |
| <u>Less: Administration Expenses</u> | 1,300 | |
| Depreciation | 250 | |
| Provision for tax | 150 | |
| Net Profit | 150 | 1,700 |
| Less: Payment of Dividends | | 200 |
| Current Year Profit | | 150 |
| <u>Add: Profit & Loss A/c (2006)</u> | | 50 |
| Balance on 31 March 2007 | | 200 |
| | | 250 |

You are also informed that a new Building was purchased on 15 June 2007 for ₹ 14,50,000/-

Solution :

Cash Flow Statement for the year ended on 31 March 2007 (₹ in '000)

| | Rs. | Rs. |
|---|----------------|------------|
| <u>Cash flows from Operating Activities :</u> | | |
| Cash receipts from customers | 4,950 | |
| Cash paid to suppliers and employees | <u>(4,200)</u> | |
| Cash generated from operations | 750 | |
| Income tax paid | <u>(100)</u> | |
| Net cash generated from operating activities | | 650 |
| <u>Cash flows from Investing Activities :</u> | | |
| Purchase of new building | (1,450) | |
| Net cash used in Investing Activities | | (1,450) |
| <u>Cash flows from Financing Activities :</u> | | |
| Raising of mortgage loan | 1,000 | |
| Dividend paid | <u>(150)</u> | |
| Net cash provided by Financing Activities | | <u>850</u> |
| Net increase in cash and cash equivalents | | 50 |
| <u>Add : Cash and cash equivalents at the beginning of the period</u> | | <u>550</u> |
| Cash and cash equivalents at the end of the year | | <u>600</u> |

Working Notes :

(₹ in '000)

| | | |
|------|---|--------------|
| (1) | Calculation of cash receipts from customers : | |
| | Sales for the year as per profit statement | 5,000 |
| | <u>Add : Trade Debtors as on 31 March 2006</u> | <u>200</u> |
| | | 5,200 |
| | <u>Less : Trade Debtors as on 31 March 2007</u> | <u>250</u> |
| | Cash receipts from customers | <u>4,950</u> |
| | | |
| (2) | Calculation of cash paid to supplier and employees : | |
| | A. Purchases for the year as per statement of profit | 3,500 |
| | <u>Add : Trade creditors as on 31 March 2006</u> | <u>500</u> |
| | | 4,000 |
| | <u>Less : Trade creditors as on 31 March 2007</u> | <u>1,000</u> |
| | Cash paid to creditors for purchase of goods (A) | <u>3,000</u> |
| | B. Administrative expenses as per statement of profit | 1,300 |
| | <u>Add : Prepaid expenses as on 31 March 2006</u> | <u>100</u> |
| | | 1,400 |
| | <u>Less : Prepaid expenses as on 31 March 2007</u> | <u>200</u> |
| | Cash paid to services (B) | <u>1,200</u> |
| | Cash paid to supplier and employees (A + B) | 4,200 |

| | |
|---|------------|
| (3) Calculation of tax paid : | |
| Opening balance of tax unpaid | 50 |
| <u>Add</u> : Provision made during the year | <u>150</u> |
| | 200 |
| <u>Less</u> : Closing balance of tax unpaid | <u>100</u> |
| Tax paid during the year ✓ | <u>100</u> |

5.5. DIFFERENCE BETWEEN FUNDS FLOW STATEMENT & CASH FLOW STATEMENT

| Basis of difference | Funds flow statement | Cash flow statement |
|---|--|---|
| 1. Basis of concept | It is based on a wider concept of funds, i.e., working capital. | It is based on a narrow concept of funds, i.e., cash. |
| 2. Basis of accounting | It is based on accrual basis of accounting. | It is based on cash basis of accounting. |
| 3. Schedule of changes in working capital | Schedule of changes in working capital is prepared to show the changes in current assets and current liabilities. | No such schedule of changes in working capital is prepared. |
| 4. Method of preparing. | Funds flow statement reveals the sources and applications of funds. The net difference between sources and applications of funds represents net increase or decrease in working capital. | It is prepared by talking the opening balance of cash, adding to this all the inflows of cash deducting the outflows of cash from the total, the difference represents the closing balance of cash. |
| 5. Basis of usefulness. | It is useful in planning intermediate and long –term financing. | It is more useful for short-term analysis and cash planning of the business. |

UNIT-5 –IMPORTANT QUESTIONS

- ✓ Objectives & uses of funds flow & cash flow statement?
- ✓ How to prepare funds flow & cash flow statement steps in preparation of funds flow statement?
- ✓ Funds flow statement Vs cash flow statement?

Problems: FUNDS FLOW AND CASH FLOW ANALYSIS.

FINANCIAL ACCOUNTING FOR MANAGERS

(For students admitted in 2017 & 2018 only)

Time: 3 hours

Max. Marks: 60

SECTION – A

(Answer the following: (05 X 10 = 50 Marks)

1 Define accounting. Explain its objectives and merits.

OR

2 Explain the classification of accounts in detail.

3 Journalize the following transaction in the books of Shankar & Co. 1998 Rs.

June 1 started business with a capital of 60,000

June 2 paid into bank 30,000

June 4 purchased goods from Kamal on credit 10,000

June 6 paid to Shiram 4,920

June 6 discount allowed by him 80

June 8 cash sales 20,000

June 12 sold to Hameed 5,000

June 15 purchased goods from Bharat on credit 7,500

June 18 paid salaries 4,000

June 20 received from Prem 2,480

June 20 allowed him discount 20

June 25 withdraw from bank for office use 5,000

June 28 withdraw for personal use 1,000

June 30 paid Hanif by cheque 3,000.

OR

4 Discuss the accounting principles in detail.

5 On April 1, 2011, company A purchased an equipment at the cost of Rs. 140,000. This equipment is estimated to have 5 year useful life. At the end of the 5th year, the salvage value (residual value) will be Rs. 20,000. Company A recognizes depreciation to the nearest whole month. Calculate the depreciation expenses for 2011, 2012 and 2013 using straight line depreciation method.**OR**

6 Discuss any four methods of valuing the inventory.

7 The following is the Balance sheet of a company as on 31st March:

| Liabilities | Rs | Assets | Rs |
|-------------------------|----------|---------------------|----------|
| Share capital | 2,00,000 | Land and building | 1,40,000 |
| Profit and loss account | 30,000 | Plant and machinery | 3,50,000 |
| General reserve | 40,000 | stock | 2,00,000 |
| 12% debentures | 4,20,000 | Sundry debtors | 1,00,000 |
| Sundry creditors | 1,00,000 | Bills receivable | 10,000 |
| Bills payable | 50,000 | Cash at bank | 40,000 |
| | 8,40,000 | | 8,40,000 |

Calculate: (i) Current ratio and quick ratio. (ii) Debt to equity ratio. (iii) Proprietary ratio. (iv) Capital gearing ratio. (v) Current assets to fixed assets ratio.

OR

8 How ratios are classified? Explain.

Contd. in page 2

9 What are the objectives of fund flow statement? Explain the merits and demerits of fund flow statement.

OR

10 Differentiate between fund flow and cash flow statement.

SECTION – B

(Compulsory question, 01 X 10 = 10 Marks)

11 **Case Study:**

From the following Trial balance of Raj Kumar prepare Trading, profit and loss account for the year ended 31st Mar 2002 and balance sheet as on that date:

Trial Balance of Raj Kumar for the year ending 31st March 2002.

| Particulars | Dr(Rs) | Cr(Rs) |
|-----------------------|----------|----------|
| Capital | | 60,000 |
| Drawings | 10,000 | |
| furniture | 5,200 | |
| Bank overdraft | | 8,400 |
| Taxes and insurance | 4,000 | |
| Creditors | | 27,600 |
| Buildings | 40,000 | |
| Opening stock | 44,000 | |
| Debtors | 36,000 | |
| Rents | | 2000 |
| Purchases | 2,20,000 | |
| Sales | | 3,00,000 |
| Sales returns | 4,000 | |
| General expenses | 8,000 | |
| Salaries | 18,000 | |
| Commission | 4,400 | |
| Carriage on purchases | 3,600 | |
| Bad debts | 1,600 | |
| Discount | 3,200 | |
| Total | 4,02,000 | 4,02,000 |

The following adjustments are to be made:

- (i) The closing stock was valued at Rs. 40,120, but there has been a loss of stock by fire during the period to the extent of Rs. 10,000 not covered by insurance.
- (ii) Depreciation on buildings Rs. 2,000 and on furniture Rs. 500 is to be provided for.
- (iii) A provision for doubtful debts at 5% on debtors is required.
- (iv) Unexpired insurance amounted to Rs. 400.
- (v) Interest on capital at 5% per annum is to be provided.

Code: 14E00104

MBA I Semester Supplementary Examinations December/January 2018/19

FINANCIAL ACCOUNTING FOR MANAGERS

(For students admitted in 2014 (LC), 2015 & 2016 only)

Time: 3 hours

Max. Marks: 60

SECTION – A

(Answer the following: (05 X 10 = 50 Marks)

1 What are the primary objectives of financial accounting? Explain.

OR

2 Discuss the main systems of recording business transactions.

3 Journalize the following transactions of Mr. Ramesh: 2013.

April 1 Ramesh started business with cash Rs.10,000

April 2 paid into bank Rs,7,000

April 3 bought goods for cash Rs.500

April 4 drew cash from bank for office use Rs.100

April 13 sold goods to Krishna on credit Rs.150

April 20 bought goods from Shyam on credit Rs.225

April 24 received from Krishna Rs.145, allowed him discount Rs.5

April 28 paid Shyam cash Rs.215, discount allowed Rs.10

April 30 cash sales for the month Rs.800, rent paid Rs.50 and paid salary Rs.100

OR

4 The following balances were extracted from the books of Rajaram on 31-12-2012.

| | Rs | | Rs |
|-------------------|--------|-----------------------|--------|
| Capital account | 9,000 | Purchases | 15,000 |
| Furniture | 800 | Carriage outwards | 200 |
| Creditors | 1,600 | Salaries | 2,000 |
| Premises | 13,000 | Sales | 18,000 |
| Bad debts | 80 | Rent received | 800 |
| Cash | 40 | Discount allowed | 180 |
| Drawings | 900 | Loan | 4,000 |
| Overdraft at bank | 905 | Reserve for bad debts | 100 |
| Debtors | 1,500 | Expenses | 705 |

Adjustments:

(i) Make provision for bad debts @3%. (ii) Salary due Rs.200. (iii) Stock on 31-12-2012 Rs.3,500. (iv) Write off 10% from furniture for depreciation. (v) Due from tenants rent Rs.100.

5 On 1st January 2011, X Ltd purchased a machine for Rs. 1,50,000 and on 1st July 2011 it acquired additional machinery at a cost of Rs. 40,000. On 1st April 2012, it sold the machinery purchased on 1st July 2011 for Rs. 32,500 and bought new machinery for Rs. 50,000. Depreciation is provided at a rate of 15% per annum using written down value method. Show the machinery account.

OR

Contd. in page 2

6 The following transactions occur in the purchase and issue of a material:

- Jan 2 purchased 4,000 units @ Rs.4 per unit
- Jan 20 purchased 500 units @ Rs.5 per unit
- Feb 5 issued 2,000 units
- Feb 10 purchased 6,000 units @ 6 per unit
- Feb 12 issued 4,000 units
- March 2 issued 1,000 units
- March 5 issued 2,000 units
- March 15 purchased 4,500 units @ 5.50 per unit
- March 20 issued 3,000 units

From the above, prepare the Stores Ledger Account using FIFO method.

7 Distinguish between funds flow statement and cash flow statement.

OR

8 From the following balances you are required to calculate cash from operations:

| | 31-12-2016 | 31-12-2017 |
|-----------------------------|------------|------------|
| Debtors | 50,000 | 47,000 |
| Bills receivables | 10,000 | 12,500 |
| Creditors | 20,000 | 25,000 |
| Bills payables | 8,000 | 6,000 |
| Outstanding expenses | 1,000 | 1,200 |
| Prepaid expenses | 800 | 700 |
| Accrued income | 600 | 750 |
| Income received in advance | 300 | 250 |
| Profit made during the year | | 1,30,000 |

9 What are the uses and limitations of ratio analysis? Explain.

OR

10 Using the following information calculate: (i) Sales.(ii) Closing stock. (iii) Sundry debtors. (iv) Sundry creditors.

Gross profit ratio: 25%

Debtors turnover ratio 4 months

Stock turnover ratio 4 months

Creditors turnover ratio 6 months

Closing stock is Rs.10,000 more than the opening stock. Bills receivable amount Rs.65,000 and Bills payable to Rs.80,000, cost of goods sold for the year is Rs.9,00,000.

SECTION – B

(Compulsory question, 01 X 10 = 10 Marks)

11 **Case Study:**

From the following information prepare a summarized balance sheet as on 31st March 2013.

Working capital Rs. 1,20,000

Reserves & Surplus Rs. 80,000

Bank overdraft Rs. 20,000

Assets(fixed) to proprietary ratio = 0.75

Current ratio = 2.5

Liquidity ratio = 1.5.

Code: 17E00104

MBA I Semester Regular Examinations December/January 2017/2018

FINANCIAL ACCOUNTING FOR MANAGERS

(For students admitted in 2017 only)

Time: 3 hours

Max. Marks: 60

SECTION – A

(Answer the following: (05 X 10 = 50 Marks)

- 1 What are the different objectives of accounting?
OR
- 2 Explain the classification of accounts and also discuss the rules of debit and credit.
- 3 Prepare a model of Trial Balance of your choice.
OR
- 4 Enumerate the accounting principles in brief.
- 5 Describe different methods of valuation of goodwill in brief.
OR
- 6 What are the limitations of straight line method of depreciation?
- 7 What are the objectives of preparing cash flow statement?
OR
- 8 Explain the following:
(a) Leverage ratio.
(b) Profitability ratio.
- 9 What do you understand by interpretation of financial statements? Explain briefly.
OR
- 10 Explain the steps involved in preparation of funds flow statement.

SECTION – B

(Compulsory question, 01 X 10 = 10 Marks)

11 **Case Study:**

From the following information prepare a store's ledger accounting under FIFO and LIFO methods.

| | | |
|-----------|---------------|-----------------------------|
| 2-1-2012 | Opening stock | 2000 units @ Rs. 10 each |
| 7-1-2012 | Purchased | 1800 units @ Rs. 12 each |
| 12-1-2012 | Issued | 2400 units |
| 14-1-2012 | Purchased | 1600 units @ Rs. 12.40 each |
| 16-1-2012 | Purchased | 600 units @ Rs. 12.80 each |
| 20-1-2012 | Issued | 1200 units |
| 28-1-2012 | Purchased | 400 units @ Rs. 13 each |
| 31-1-2012 | Issued | 400 units |

Code: 14E00104

MBA I Semester Regular & Supplementary Examinations December/January 2016/2017

FINANCIAL ACCOUNTING FOR MANAGERS

(For students admitted in 2014, 2015 & 2016 only)

Time: 3 hours

Max. Marks: 60

PART – A

(Answer the following: (05 X 10 = 50 Marks)

1 How accounts are classified? Explain.

OR

2 What is the difference between book-keeping and accounting system?

3 The following are the closing balances extracted from the books of Sandeep traders for the year ending 31st Dec, 2015 with the help of which prepare trading A/c, profit & loss A/c and balance sheet.

| Debit balance | Rs. | Credit balance | Rs. |
|------------------|-------|-------------------|-------|
| Opening stock | 6050 | Sales | 13720 |
| Purchases | 9030 | Purchase returns | 130 |
| Carriage | 220 | Capital | 3000 |
| Drawings | 450 | Creditors | 4500 |
| Investments | 3800 | Discount received | 350 |
| Debtors | 2500 | Mortgage loan | 4000 |
| Printing charges | 1200 | | |
| Wages | 1100 | | |
| Total | 25700 | Total | 25700 |

Adjustments:

- (a) Closing stock was valued at Rs. 16000.
- (b) Wages outstanding by Rs. 900.
- (c) Outstanding discounts receivables Rs. 150.
- (d) Write off bad debts Rs. 500.
- (e) Create a reserve for bad and doubtful debts Rs. 500.

OR

4 What is trading account? What purpose does it serve?

5 Discuss various methods of calculating depreciation.

OR

6 From the following details, prepare stores ledger using simple average method of pricing the issues. January 2016:

- 1st: Received 500 units @ Rs. 20 per unit.
- 10th: Received 300 units @ Rs. 24 per unit.
- 15th: Issued 700 units.
- 20th: Received 400 units @ Rs. 28 per unit.
- 25th: Issue 300 units.
- 27th: Received 500 units @ Rs. 22 per unit.
- 31st: Issued 200 units.

Contd. in page 2

Code: 14E00104

7 What are the uses and limitations of cash flow analysis?

OR

8 The following are the summary of cash transactions extracted from the books of XYZ Ltd:

(Rs. in '000's)

| | |
|---|--------------|
| Balance as on 1 st April, 2015 | 140 |
| Receipts from customers | 11132 |
| Issue of shares | 1200 |
| Sale of fixed assets | 512 |
| | <u>12984</u> |

| | |
|---------------------------|--------------|
| Payments to suppliers | 8188 |
| Payments for fixed assets | 920 |
| Payments for overheads | 460 |
| Wages and salaries | 276 |
| Taxation | 972 |
| Dividends | 320 |
| Repayment of bank loans | 1000 |
| | <u>12136</u> |

Balance as on 31st March, 2016 is 848. You are required to prepare a cash flow statement of the company for the period ended 31st March, 2016.

9 What is ratio? Explain different ratios.

OR

10 How do you analyze and interpret financial statements of a company for reporting on the soundness of its capital structure and solvency?

PART – B

(Compulsory question, 01 X 10 = 10 Marks)

11 **Case study:**

The particulars of income and expenses of a XYZ company are given below for the year ending 31/03/2016.

| Particulars | Rs. | Particulars | Rs. |
|---------------------------------|----------|------------------------|----------|
| Opening stock | 76250 | Sales | 5,00,000 |
| Purchases | 315250 | Closing stock | 98500 |
| Manufacturing expenses | 7000 | Income from investment | 6000 |
| Administration expenses | 1,00,000 | | |
| Selling & distribution expenses | 12000 | | |
| Loss by fire | 13000 | | |

From the above information you are required to find :

- (a) Operating ratio.
- (b) Operating profit ratio.
- (c) Stock turnover ratio.
- (d) Gross profit ratio.
- (e) Net profit ratio.

Code: 14E00104

MBA I Semester Supplementary Examinations August 2015

FINANCIAL ACCOUNTING FOR MANAGERS

(For students admitted in 2014 only)

Time: 3 hours

Max. Marks: 60

All questions carry equal marks

SECTION - A

Answer the following: (05 X 10 = 50 Marks)

- 1 Define financial accounting and explain in detail the principles of accounting.
(OR)
- 2 What is dual concept of accounting and explain the accounting equation with suitable example transaction.
- 3 What are subsidiary books of accounts? Discuss in detail the three column cash book.
(OR)
- 4 From the given balances extracted at the close of the year ended 31.03.2013, prepare profit and loss account of Satyam company limited.

| Particulars | Amount in Rs. |
|------------------------------|---------------|
| Gross profit | 1,01,000 |
| Carriage outward | 2,500 |
| Salaries | 5,500 |
| Rent | 4,100 |
| Fire insurance premium | 900 |
| Bad debts | 2,100 |
| Income tax paid | 3,500 |
| Life insurance premium | 3,000 |
| Discount (dr.) | 500 |
| Apprentice premium (cr.) | 1,500 |
| Printing and stationery | 250 |
| Rates and taxes | 350 |
| Travelling expenses | 200 |
| Sundry trade expenses | 300 |
| Rent received on sub letting | 1,000 |

- 5 Discuss the various methods of inventory issue and write merits and demerits of each method.
(OR)
- 6 On 1.7.2010 XYZ Ltd. purchased a machine for Rs.40,000 and spent Rs.6,000 for installation. On 1.1.2011 a new machine was purchased for Rs.24,000. On 30.6.2012 the machine purchased on 1.1.2011 was sold for Rs.16,000 and another machine was installed for Rs.30,000. The company writes off 10 percent on straight line method of depreciation on every year of 31st March. Show the machinery account.
- 7 Explain the steps in the preparation of funds flow statement. Discuss in brief about uses of funds flow statement.
(OR)
- 8 Distinguish among cash flow from operating, investing and financing activities. Provide examples of each type of activity as per AS 3 and show a proforma statement of cash flows.

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- 9 What is meant by horizontal and vertical analysis of financial statement and explain by giving suitable examples.

(OR)

- 10 From the following information of ABC Ltd. You are required to calculate the following ratios.
 (i) Gross profit percent. (ii) Net profit percent. (iii) Return on total assets.
 (iv) Quick assets ratio. (v) Debtors collection period. (vi) Stock turnover ratio.

| Particulars | Amount in Rs. |
|-------------------------------------|---------------|
| Sales for the year | 3,100 |
| Gross profit | 1,725 |
| Expenses | 805 |
| Depreciation | 250 |
| Share capital | 450 |
| Retained earnings | 240 |
| 12% debentures | 700 |
| Creditors | 620 |
| Proposed dividends | 45 |
| Fixed assets net after depreciation | 875 |
| Stocks | 310 |
| Debtors | 770 |
| Bank balance | 100 |

SECTION – B

(Compulsory Question)

01 X 10 = 10 Marks

- 11
- Case study:**

From following details relating to the accounts of Grow More ltd. Prepare cash flow statement:

| Particulars | 31.03.2007 Rs. | 31.03.2006 Rs. |
|------------------------|-------------------|-------------------|
| Liabilities | | |
| Share capital | 1,000 | 800 |
| Reserves | 200 | 150 |
| Profit and loss a/c | 100 | 60 |
| Debentures | 200 | - |
| Provision for taxation | 100 | 70 |
| Proposed dividends | 200 | 100 |
| Sundry creditors | 700 | 820 |
| Total | 2,500 | 2,000 |
| Assets | | |

MBA I Semester Regular Examinations February/March 2015

FINANCIAL ACCOUNTING FOR MANAGERS

(For students admitted in 2014 only)

Time: 3 hours

Max. Marks: 60

All questions carry equal marks

SECTION – A

Answer the following: (05 X 10 = 50 Marks)

- 1 Discuss in detail about concepts and conventions of financial accounting.
(OR)
- 2 Classify the types of accounts and write accounting rules with example transaction for each type of account.
- 3 What do you understand by trial balance? Explain its uses in preparation of final accounts and rectification of errors.

(OR)

- 4 From the following data of ABC company, prepare cash book with cash and bank columns:

| | |
|--|----------|
| June 1 cash balance | 50,000 |
| Bank balance | 1,75,000 |
| June 5 cash received from sale of shares | 5,50,000 |
| June 6 paid into bank | 5,00,000 |
| June 7 paid S.Bose by cheque | 1,25,000 |

June 20 received from Mukerjee by cheque for Rs 60,000 and deposited the same in the bank.

- 5 Discuss in detail the concept of depreciation and write a brief note on methods of depreciation.
(OR)
- 6 Show the store's ledger entries as they would appear when using:
(i) Weighted average method.
(ii) LIFO method of pricing the issues in connection with the following transactions.

| April | Unit | Value |
|-------------------|------|-------|
| 1 balance in hand | 300 | 600 |
| 2 purchased | 200 | 450 |
| 4 issued | 150 | - |
| 6 purchased | 200 | 460 |
| 11 issued | 150 | - |
| 19 issued | 200 | - |
| 20 purchased | 200 | 480 |
| 27 issued | 250 | - |

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- 7 "A cash flow statement is required to explain the changes in cash account balances between balance sheet dates". Explain the statement.

(OR)

- 8 From the following sheets for the year 2010 and 2011 find out funds from operations.

| Particulars | 2010 (Rs) | 2011 (Rs) |
|---------------------------------------|-----------|-----------|
| General reserve | 10000 | 12500 |
| Good will | 5000 | 2500 |
| Provision for depreciation on plant | 5000 | 6000 |
| Preliminary expenses | 3000 | 2000 |
| Profit and loss appropriation account | 15000 | 20000 |

- 9 Explain the significance of ratio analysis in interpretation of final accounts. Discuss in brief the various categories of ratios.

(OR)

- 10 The total sales (all credit) of a firm is Rs 64, 0000. It has gross profit margin of 15% and a current ratio of 2.5. The firms current liabilities are Rs 96,000; inventories Rs 48,000 and cash Rs 16,000. (i) Determine the average inventory to be carried by the firm, if an inventory turnover of 5 times is expected. (ii) Determine the average collection period, if the opening balance of debtors is intended to be of Rs 80,000.

SECTION – B

(Compulsory Question)

01 X 10 = 10 Marks

- 11 Case study:

The book value of plant and machinery on 1.1.2010 was Rs 200000. New machinery for Rs 10000 was purchased on 1.10.2010 and for Rs 20000 on 1.7.2011. On 1.4.2012 a machinery whose book value had been Rs 30000 on 1.1.2010 was sold for Rs 16000 and the entire amount was credited to plant and machinery account. Depreciation has charged at 10 percent per annum on book value 1.1.2010 on straight line method. It was decided on 31.12.2012 that depreciation at the rate of 20 percent per annum on diminishing balance method should be charged with a retrospective effect since 1.1.2011. Show the plant and machinery account from 1.1.2010 to 31.12.2012.
