## CHAPTER 6

## Financial Statements: Analysis and Interpretation

## Meaning of Financial Statements

Every business concern wants to know the various financial aspects for effective decision making. The preparation of financial statement is required in order to achieve the objectives of the firm as a whole. The term financial statement refers to an organized collection of data on the basis of accounting principles and conventions to disclose its financial information. Financial statements are broadly grouped in to two statements:
I. Income Statements (Trading, Profit and Loss Account)
II. Balance Sheets

In addition to above financial statements supported by the following statements are prepared to meet the needs of the business concern:
(a) Statement of Retained Earnings
(b) Statement of Changes in Financial Position

The meaning and importance of the financial statements are as follows :
(1) Income Statements: The term 'Income Statements' is also known as Trading, Profit and Loss Account. This is the first stage of preparation of final accounts in accounting cycle. The purpose of preparing Trading, Profit and Loss Accounts to ascertain the Net Profit or Net Loss of a business concern during the accollnting period.
(2) Balance Sheet: Balance Sheet may be defined as "a statement of financial position of any economic unit disclosing as at a given moment of time its assets, at cost, depreciated cost, or other indicated value, its liabilities and its ownership equities." In other words, it is a statement which indicates the financial position or soundness of a business concern at a specific period of time. Balance Sheet may also be described as a statement of source and application of funds because it represents the source where the funds for the business were obtained and how the funds were utilized in the business.
(3) Statement of Retained Earnings: This statement is considered to be as the connecting link between the Profit and Loss Account and Balance Sheet. The accumulated excess of earning over losses
and dividend is treated as Retained Earnings. The balance of retained earnings shown on the Profit and Loss Accounts and it is transferred to liability side of the balance sheet.
(4) Statement of Changes in Financial Position: Income Statements and Balance sheet do not disclose the operational efficiency of the concern. In order to measure the operational efficiency of the concern it is essential to identify the movement of working capital or cash inflow or cash outflow of the business concern during the particular period. To highlight the changes of financial position of a particular firm, the statement is prepared may emphasize of the following aspects :
(c) Fund Flow Statement is prepared to know the changes in the firm's working capital.
(d) Cash Flow Statement is prepared to understand the changes in the firm's cash position.
(e) Statement of Changes in Financial Position is used for the changes in the firm's total financial position.

## Nature of Financial Statements

Financial Statements are prepared on the basis of business transactions recorded in the books of Original Entry or Subsidiary Books, Ledger, and Trial Balance. Recording the transactions in the books of primary entry supported by document proofs such as Vouchers, Invoice Note etc.

According to the American Institute of Certified Public Accountants, "Financial Statement reflects a combination of recorded facts, accounting conventions and personal judgments and conventions applied which affect them materially." It is therefore, nature and accuracy of the data included in the financial statements which are influenced by the following factors:
(1) Recorded Facts.
(2) Generally Accepted Accounting Principles.
(3) Personal Judgments.
(4) Accounting Conventions.

## Objectives of Financial Statements

The following are the important objectives of financial statements :
(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.

## Limitations of Financial Statements

(1) Financial Statements are normally prepared on the basis of accounting principles, conventions and past experiences. Therefore, they do not communicate much about the profitability, solvency, stability, liquidity etc. of the undertakers to the users of the statements.
(2) Financial Statements emphasise to disclose only monetary facts, i.e., quantitative information and ignore qualitative information.
(3) Financial Statements disclose only the historical information. It does not consider changes in money value, fluctuations of price level etc. Thus, correct forecasting for future is not possible.
(4) Influences of personal judgments leads to opportunities for manipulation while preparing of financial statements.
(5) Information disclosed by financial statements based on accounting concepts and conventions. It is unrealistic due to difference in terms and conditions and changes in economic situations.

## Analysis and Interpretations of Financial Statements

Presentation of financial statements is the important part of accounting process. To provide more meaningful information to enable the owners, investors, creditors or users of financial statements to evaluate the operational efficiency of the concern during the particular period. More useful information are required from the financial statements to make the purposeful decisions about the profitability and financial soundness of the concern. In order to fulfil the needs of the above, it is essential to consider analysis and interpretation of financial statements.

## Meaning of Analysis and Interpretations

The term "Analysis" refers to rearrangement of the data given in the financial statements. In other words, simplification of data by methodical classification of the data given in the financial statements.

The term "interpretation" refers to "explaining the meaning and significance of the data so simplified."

Both analysis and interpretations are closely connected and inter related. They are complementary to each other. Therefore presentation of information becomes more purposeful and meaningful-both analysis and interpretations are to be considered.

Metcalf and Tigard have defined financial statement analysis and interpretations as a process of evaluating the relationship between component parts of a financial statement to obtain a better understanding of a firm's position and performance.

The facts and figures in the financial statements can be transformed into meaningful and useful figures through a process called "Analysis and Interpretations."

In other words, financial statement analysis and interpretation refer to the process of establishing the meaningful relationship between the items of the two financial statements with the objective of identifying the financial and operational strengths and weaknesses.

## Types of Analysis and Interpretations

The analysis and interpretation of financial statements can be classified into different categories depending upon :
I. The Materials Used
II. Modus Operandi (Methods of Operations to be followed)

## I. On the basis of Materials Used:

(a) External Analysis.
(b) Internal Analysis.

## II. On the basis of Modus Operandi

(a) Vertical Analysis.
(b) Horizontal Analysis.

The following chart shows the classification of financial analysis:


## I. On the Basis of Materials Used

On the basis of materials used the analysis and interpretations of financial statements may be classified into (a) External Analysis and (b) Internal Analysis.
(a) External Analysis: This analysis meant for the outsiders of the business firm. Outsiders may be investors, creditors, suppliers, government agencies, shareholders etc. These external people have to rely only on these published financial statements for important decision making. This analysis serves only a limited purpose due to non-availability of detailed information.
(b) Internal Analysis: Internal analysis performed by the persons who are internal to the organization. These internal people who have access to the books of accounts and other informations related to the business. Such analysis can be done for the purpose of assisting managerial personnel to take corrective action and appropriate decisions.

## II. On the basis of Modus Operandi

On the basis of Modus operandi, the analysis and interpretation of financial statements may be classified into: (a) Horizontal Analysis and (b) Vertical Analysis.
(a) Horizontal Analysis: Horizontal analysis is also termed as Dynamic Analysis. Under this type of analysis, comparison of the trend of each item in the financial statements over the number of years are reviewed or analyzed. This type of comparison helps to identify the trend in various indicators of performance. In this type of analysis, current year figures are compared with base year for figures are presented horizontally over a number of columns.
(b) Vertical Analysis: Vertical Analysis is also termed as Static Analysis. Under this type of analysis, a number of ratios used for measuring the meaningful quantitative relationship between the items of financial statements during the particular period. This type of analysis is useful in comparing the performance, efficiency and profitability of several companies in the same group or divisions in the same company.

## Rearrangement of Income Statements

Financial statements should be rearranged for proper analysis and interpretations of these statements. It enables to measure the performance of operational efficiency and profitability of a concern during
particular period. The items of operating revenues, non-operating revenues, operating expenses and nonoperating expenses are rearranged into different heads and sub-heads are given below :

## Income Statement (Operating Statement)

 for the year endings| Particulars | Amount Rs. | Amount Rs. |
| :---: | :---: | :---: |
| Opening stock of Raw Materials |  |  |
| Add: Purchases | ... |  |
| Less : Purchases Returns | . . | ... |
| Freight and Carriage |  | $\ldots$ |
| Less: Closing Stock of Raw Materials |  | -•• |
|  |  | ... |
| Raw Materials Consumed (1) |  | $\cdots$ |
| Add : Direct wages (Factory) | $\ldots$ |  |
| Factory Rent and Rates | . . |  |
| Power and Coal | $\ldots$ |  |
| Depreciation of Plant and Machinery | $\cdots$ |  |
| Depreciation of Factory Building | . . . |  |
| Work Manager's Salary | $\ldots$ |  |
| Other Factory Expenses | $\cdots$ | $\ldots$ |
| Add: Opening Stock of working progress | $\ldots$ |  |
| Opening Stock of Finished goods | $\cdots$ |  |
|  | $\ldots$ |  |
| Less : Closing Stock of work in progress | ... |  |
| Closing Stock of Finished goods | $\ldots$ | $\ldots$ |
| Cost of Goods Sold (2) |  | $\ldots$ |
| Less: Net Sales (Less sales return and Sales tax) (3) |  | $\ldots$ |
| Gross Profit : (4) = (3-2) (Net Sales - Cost of Goods Sold) |  | $\cdots$ |
| Less: Operating Expenses : (5) |  |  |
| Office Expenses | $\ldots$ |  |
| Administrative Expenses | $\ldots$ |  |
| Selling Expenses | $\ldots$ |  |
| Distribution Expenses | -- | $\ldots$ |
| Net Operating Profit : (6) $=(4-5$ ) |  | $\cdots$ |
| Add : Non-Operating Income : (7) | $\ldots$ |  |
| Interest Received | $\ldots$ |  |
| Discount Received | $\cdots$ |  |
| Dividend Received | . . |  |
| Income Form Investment | ... |  |
| Interest on Debenture | $\ldots$ |  |
| Any other Non-Trading Income | $\ldots$ | $\ldots$ |
|  |  | $\cdots$ |


| Particulars | Amount Rs. | Amount Rs. |
| :---: | :---: | :---: |
| Less : Non-Operating Expenses : (8) |  |  |
| Discount on Issue of Shares Written off <br> Interest on Payment on Loan and Overdraft <br> Loss on Sale of Fixed Assets | $\ldots$ |  |
| Net Profit Before Interest and Tax (9) |  |  |
| Less : Interest on Debenture (10) | $\ldots$ | $\ldots$ |
| Net Profit Before Tax (11) = (9 - 10) |  |  |
| (Net Profit Before Interest and Tax-Interest on Debenture) <br> Tax Paid (12) <br> Net Profit After Interest and Tax (13) <br> or Net Loss After Interest and Tax <br> (Transferred to Capital Account) |  | $\ldots$ |

## Income Statement Equations

From the above rearrangement of operating statements, the following accounting equations may be given :
(1) Net Sales $=$ Cost of Sales + Operating Expenses + Non-Operating Expenses
(2) Gross Profit
$=\quad$ Net Sales - Cost of Goods Sold
(3) Operating Expenses
$=$ Office and Administrative Expenses + Selling and Distribution Expenses
(4) Operating Expenses
$=$ Gross Profit - Net Operating Profit
(5) Sales - Net Operating Profit $=$ Cost of Sales + Operating Expenses
(6) Net Operating Profit $=$ Gross Profit - Operating Expenses
(7) Net Profit Before Interest and Tax $=$ Net Operating Profit - Non-Operating Expenses
(8) Sales $\quad=\quad$ Cost of Sales + Operating Expenses + Non-Operating Expenses
(9) Net Profit $=$ Net Sales - (Cost of Sales + Operating Expenses + Non-Operating Expenses)

## Rearrangement of Balance Sheet

Balance sheet is a statement consisting of assets and liabilities which reflected the financial soundness of a concern at a given date. In order to judge the financial position of a concern, it is also necessary to rearrange the balance sheet in a proper set of form. For analysis and interpretation, the figures in Balance Sheet rearranged in a Vertical Form and given below.

Balance Sheet as on 31 ${ }^{\text {sl }}$ Dec.

\begin{tabular}{|c|c|c|}
\hline Particulars \& Amount Rs. \& Amount Rs. \\
\hline \begin{tabular}{l}
Cash in Hand \\
Cash at Bank \\
Bills Receivable \\
Sundry Debtors \\
Marketable Securities \\
Other Short-Term Investments
\end{tabular} \&  \& \\
\hline \begin{tabular}{l}
Liquid Assets (1) \\
Add: Stock in Trade (Closing Stock of Raw Materials Closing Stock of Work in Progress Closing Stock of Finished goods) Prepaid Expenses
\end{tabular} \&  \& \(\ldots\) \\
\hline \begin{tabular}{l}
Current Assets (2) \\
Less : Current Liabilities : \\
Bills Payable \\
Sundry Creditors \\
Bank Loans (Short-term) \\
Bank Overdraft \\
Outstanding Expenses \\
Accrued Expenses \\
Trade Liabilities \\
Other Liabilities Payable within year
\end{tabular} \&  \& \(\cdots\)

$\ldots$ <br>
\hline  \& $\cdots$
$\cdots$
$\cdots$
$\cdots$ \& $\cdots$

$\ldots$ <br>

\hline | Net Working Capital (6) $=(2-5)$ |
| :--- |
| (Current Assets - Total Current Liabilities \& Provision) |
| Add : Fixed Assets : (6) |
| Goodwill |
| Land and Buildings |
| Plant and Machinery |
| Loose Tools |
| Furniture and Fixtures |
| Patents and Copyrights |
| Live Stock |
| Investment in Subsidies | \&  \& $\cdots$

$\ldots$ <br>

\hline | Capital Employed (7) $=(5+6)$ |
| :--- |
| (Net Working Capital + Fixed Assets) |
| Add : Other Assets : (8) |
| Investment in Govt. Securities |
| Unquoted Investments |
| Other Non-Trading Investments |
| Advances to Directors | \& $\cdots$

$\cdots$
$\cdots$
$\cdots$ \& $\cdots$

$\ldots$ <br>
\hline Company's Net Assets (9) $=(7+8)$ (Capital Employed + Other Assets) \& \& $\ldots$ <br>
\hline
\end{tabular}

| Particulars | Amount Rs. | Amount Rs. |
| :---: | :---: | :---: |
| Less : Long-Term Liabilities (10) |  |  |
| Debenture |  |  |
| Long-Term Debt |  |  |
| Long-Term Loan from Bank 7 - |  |  |
| \& Financial Institutions | -•• |  |
| Long-Term Debt Raised by Issue of Securities |  |  |
| Other Long-Term Loan payable after a year | $\cdots$ | . . |
| Share Holders Net Worth (11) =(9-10) <br> (or) Total Tangible Net Assets - Shareholders <br> Net Worth $]$ |  | . . |
| Less: Preference Share Capital (12) |  | $\cdots$ |
| Equity Shareholders Net Worth (13) = (11-12) (Total Tangible Net Worth - Preference Share Capital) |  | $\cdots$ |

## Balance Sheet Equations :

From the above Balance Sheet the following accounting equations may be drawn:
(1) Liquid Assets $=$ Current Assets - Stock and Prepaid Expenses
(2) Net Working Capital $=$ Current Assets - Current Liabilities
(3) Current Assets $=$ Net Working Capital - Current Liabilities
(4) Capital Employed
$=\quad$ Net Working Capital + Fixed Assets
(or)
Capital Employed $=($ Current Assets - Current Liabilities) + Fixed Assets (or)

Capital Employed $=$ Total Assets - Current Liabilities
(5) Shareholders' Net Worth $\quad=\quad$ Company's Net Assets - Shareholders' Net Worth
(6) Equity Shareholders' Net Worth $=$ Total Tangible Net Worth - Preference Share Capital

## Methods or Tools of Analysis and Interpretations

The following are the various techniques can be adopted for the analysis and interpretations of financial statements.
(1) Comparative Financial Statements.
(2) Common Size Statements.
(3) Trend Analysis.
(4) Ratio Analysis.
(5) Fund Flow Analysis.
(6) Cash Flow Analysis.

## (1) Comparative Financial Statements

Under this form of comparative financial statements both the comparative Profit and Loss Account and comparative Balance sheet are covered. Such comparative statements are prepared not only to the comparison of the various figures of two or more periods but also the relationship between various elements embodied in profit and loss account and balance sheet. It enables to measure operational efficiency and financial soundness of the concern for analysis and interpretations. The following information may be shown in the comparative statements:
(a) Figures are presented in the comparative statements side by side for two or more years.
(b) Absolute data in money value.
(c) Increase or Decrease between the absolute figures in money value.
(d) Changes or trend in various figures in terms of percentage.

## Illustration: 1

From the following Profit and Loss Account AVS Ltd., for the years 2002 and 2003, you are required to prepare a Comparative Income Statement.

Statements of Profit and Loss Account

| Particulars | 2002 <br> $R s$. | 2003 <br> $R s$. |
| :--- | :---: | :---: |
| Net sales | 4,000 | 5,000 |
| Less : Cost of goods sold | 3,000 | 3,750 |
| Gross Profit | 1,000 | 1,250 |
| Less : Operating Expenses |  |  |
| Office and Administrative Expenses |  |  |
| Selling and Distribution Expenses | 200 | 250 |
| Total Operating Expenses | 225 | 300 |
| Net Profit | 425 | 550 |

Solution:
AVS Ltd.
Statements of Profit and Loss Account

| Particulars | 2002 | 2003 |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Rs. | Rs. | Increase or Decrease in 2003 |  |
|  |  | Absolute <br> in 2003 Rs. | Percentage <br> $(\%)$ |  |
| Net sales | 4,000 | 5,000 | $+1,000$ | +25 |
| Less : Cost of Goods Sold | 5,000 | 3,750 | $+1,500$ | +25 |
| Gross Profit | 1,000 | 1,250 | +250 | +25 |
| Less : Operating Expenses : |  |  |  |  |
| Office and Administrative Expenses | 200 | 250 | +50 | +25 |
| Selling and Distribution Expenses | 225 | 300 | +75 | +33.33 |
| Total Operating Expenses | 425 | 550 | +125 | +29.41 |
| Net Profit (Gross Profit-Total Operating Expenses) | 575 | 700 | +125 | +21.73 |

## Interpretation

From the above statement, it is observed that the sales has increased to the extent of $25 \%$. The cost of goods sold and its percentage increased by $25 \%$. Administrative and selling \& distribution expenses have been increased by $25 \%$ and $33.33 \%$ respectively. The rate of net profit is also increased to the extent of $21.73 \%$. This indicates that the overall profitability of the concern is good.

Illustration: 2
From the following Profit and Loss Account, you are required to convert into Comparative Profit and Loss Account for the year 2002 and 2003:

Dr.
Profit and Loss Account for the Year 2002 and 2003
Cr.

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Cost of goods sold To Gross Profit c/d | 1,18,000 | 1,47,000 | By Net Sales | 2,00,000 | 2,25,000 |
|  | 82,000 | 78,000 |  |  |  |
|  | 2,00,000 | 2,25,000 |  | 2,00,000 | 2,25,000 |
|  <br> Administrative Expenses] <br> To Selling \& Distribution <br> Expenses | 5,000 | 6,000 | By Gross Profit b/d $\left.\begin{array}{l}\text { By Non-Operating } \\ \text { Income }\end{array}\right]$ Income | 82,000 | 78,000 |
|  |  |  |  | 10,000 | 15,000 |
|  |  | 8,000 |  |  |  |
| To Non-Operating Expenses | 5,000 | 7,000 |  |  |  |
| To Net Profit c/d | 75,000 | 72,000 |  |  |  |
|  | 92,000 | 93,000 |  | 92,000 | 93,000 |

Solution :
Comparative Income Statement
for the year ending 2002 and 2003

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{array}{r} 2003 \\ \text { Rs. } \end{array}$ | Increase or Decrease in 2003 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Absolute in 2003 Rs. | Percentage <br> (\%) |
| Net sales | 2,00,000 | 2,25,000 | + 25,000 | + 12.5 |
| Less : Cost of Goods Sold | 1,18,000 | 1,47,000 | + 29,000 | + 24.57 |
| Gross Profit | 82,000 | 78,000 | -4,000 | - 4.87 |
| Less: Operating Expenses : General \& Administrative Expenses Selling \& Distribution Expenses | $\begin{aligned} & 5,000 \\ & 7,000 \\ & \hline \end{aligned}$ | $\begin{aligned} & 6,000 \\ & 8,000 \\ & \hline \end{aligned}$ | $\begin{array}{r} +1,000 \\ +1,000 \\ \hline \end{array}$ | $\begin{aligned} & +20 \\ & +14.28 \\ & \hline \end{aligned}$ |
| Total Operating Expenses | 12,000 | 14,000 | + 2,000 | +16.66 |
| Net Profit <br> Add: Non-Operating Income | $\begin{aligned} & 70,000 \\ & 10,000 \end{aligned}$ | $\begin{aligned} & 64,000 \\ & 15,000 \end{aligned}$ | $\begin{array}{r} -6,000 \\ +5,000 \end{array}$ | $\begin{aligned} & -8.57 \\ & +50 \end{aligned}$ |
| Total Income | 80,000 | 79,000 | - 1,000 | - 1.25 |
| Less: Non-Operating Expenses | 5,000 | 7,000 | + 2,000 | + 40 |
| Net Profit | 75,000 | 72,000 | -3,000 | -4 |

## Interpretation

The rate of increase in sales is to extent of ( $12.5 \%$ ) while cost of sales increased by ( $33.5 \%$ ). The gross profit has declined by ( $-4.87 \%$ ). It indicates that performance of operational efficiency is not much better and the cost of sales has not been under control.

The Operating Profit and Net Profit have declined by ( $-8.57 \%$ ) and ( $-4 \%$ ) respectively. The increase in operating and non operating expenses are to extent of $+16.66 \%$ and $+40 \%$. This indicates that the overall profitability of a concern is not good.

## Illustration: 3

From the following Balance sheet of ABC Ltd., for the year ending 31st Dec. 2002 and 2003, you are required to prepare a Comparative Balance Sheet :

| Particulars | 2002 <br> $R s$. | 2003 <br> $R s$. |
| :--- | ---: | ---: |
| Assets : |  |  |
| Cash in Hand | 5,000 | 5,500 |
| Cash at Bank | 3,500 | 5,000 |
| Sundry Debtors | 45,000 | 40,000 |
| Stock | 35,000 | 40,000 |
| Bills Receivable | 11,000 | 11,500 |
| Prepaid Expenses | 2,500 | 3,000 |
| Fixed Assets | $1,56,000$ | $1,65,000$ |
|  | $2,52,000$ | $2,70,000$ |
|  |  |  |
| Liabilities \& Capital : | $1,35,000$ | $1,45,000$ |
| Share Capital | 32,000 | 35,000 |
| Short-Term Loan | 45,000 | 42,000 |
| Long-Term Debt | 7,000 | 5,000 |
| Bills Payable | 6,000 | 8,000 |
| Sundry Creditors | 27,000 | 35,000 |
| Bank Overdraft | $2,52,000$ | $2,70,000$ |
|  |  |  |

## Solution:

Comparative Balance Sheet

| Particulars | 2002 <br> Rs. | 2003 <br> $R s$. | Increase or <br> Decrease in 2003 Rs. | Percentage of Increase <br> or Decrease in 2003 |
| :--- | ---: | ---: | :---: | :---: |
| Assets : |  |  |  |  |
| Liquid Assets : | 5,000 | 5,500 | +500 | $+10 \%$ |
| Cash in Hand | 3,500 | 5,000 | +1500 | $+42.85 \%$ |
| Cash at Bank | 45,000 | 40,000 | -5000 | $-11.11 \%$ |
| Sundry Debtors | 11,000 | 11,500 | +500 | $+4.54 \%$ |
| Bills Receivable | 64,500 | 62,000 | -2500 | $-3.87 \%$ |
| Total Liquid Assets | 35,000 | 40,000 | +5000 | $+14.28 \%$ |
| Add : Stock | 2,500 | 3,000 | +500 | $+20 \%$ |
| Prepaid Expenses | $1,02,000$ | $1,05,000$ | +3000 | $+2.94 \%$ |
| Total Current Assets | $1,50,000$ | $1,65,000$ | +15000 | $+10 \%$ |
| Fixed Assets |  |  |  |  |


| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Increase or Decrease in 2003 Rs. | Percentage of Increase or Decrease in 2003 |
| :---: | :---: | :---: | :---: | :---: |
| Total Assets | 2,52,000 | 2,70,000 | $+18000$ | + $7.14 \%$ |
| Liabilities and Capital Current Liabilities : Short-Term Loan Bills Payable Sundry Creditors Bank Overdraft | $\begin{array}{r} 32,000 \\ 7,000 \\ 6,000 \\ 27,000 \end{array}$ | $\begin{array}{r} 35,000 \\ 5,000 \\ 8,000 \\ 35,000 \end{array}$ | $\begin{aligned} & +3000 \\ & -2000 \\ & +2000 \\ & +8000 \end{aligned}$ | $\begin{aligned} & +9.37 \% \\ & -28.57 \% \\ & +33.33 \% \\ & +29.62 \% \end{aligned}$ |
| Total Current Liabilities Long Term Liabilities : Long-Term Debts | $\begin{aligned} & 72,000 \\ & 45,000 \end{aligned}$ | $\begin{aligned} & 83,000 \\ & 42,000 \end{aligned}$ | $\begin{array}{r} +11000 \\ -3000 \\ \hline \end{array}$ | $\begin{aligned} & +15.27 \% \\ & -6.66 \% \end{aligned}$ |
| Total Liabilities Share Capital | $\begin{aligned} & 1,17,000 \\ & 1,35,000 \end{aligned}$ | $\begin{aligned} & 1,25,000 \\ & 1,45,000 \\ & \hline \end{aligned}$ | $\begin{array}{r} +8000 \\ +10000 \\ \hline \end{array}$ | $\begin{array}{r} +6.83 \% \\ +7.40 \% \\ \hline \end{array}$ |
| Total Liabilities \& Capital | 2,52,000 | 2,70,000 | + 18000 | + $7.14 \%$ |

## Illustration: 4

The Following is the Balance Sheet ABC Ltd. for the year 2002 amd 2003. Prepare Comparative Balance sheet:

Balance Sheet of ABC Ltd. for the year 2002 and 2003

| Liabilities | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Assets | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current Liabilities | 37,000 | 50,000 | Cash in Hand | 3,000 | 5,000 |
| Debenture | 50,000 | 60,000 | Cash at Bank | 10,000 | 20,000 |
| Long-Term Debts | 2,00,000 | 2,50,000 | Bills Receivable | 7,000 | 10,000 |
| Capital : |  |  | Sundry Debtors | 10,000 | 15,000 |
| Preference Share 7 |  |  | Stock | 20,000 | 25,000 |
| Capital 5 | 1,00,000 | 1,50,000 | Fixed Assets | 4,90,000 | 6,25,000 |
| Equity Capital | 1,25,000 | 1,60,000 |  |  |  |
| General Reserve, | 28,000 | 30,000 |  |  |  |
|  | 5,40,000 | 7,00,000 |  | 5,40,000 | 7,00,000 |

Solution:
ABC Ltd.
Comparative Balance Sheet as on 31 ${ }^{\text {st }}$ Dec. 2002 \& 2003

| Particulars | 2002 <br> Rs. | 2003 <br> Rs. | Increase or <br> Decrease in 2003 Rs. | Percentage of Increase <br> or Decrease in 2003 $(\%)$ |
| :--- | ---: | :---: | :---: | :---: |
| Assets : |  |  |  |  |
| $\quad$ Cash in Hand | 3,000 | 5,000 | +2000 | +66.66 |
| Cash at Bank | 10,000 | 20,000 | +10000 | +100 |
| Bills Receivable | 7,000 | 10,000 | +3000 | +42.85 |
| Sundry Debtors | 10,000 | 15,000 | +5000 | +50 |
| Total Liquid Assets | 30,000 | 50,000 | +20000 | +66.66 |
| Add Stock | 20,000 | 25,000 | +5000 | +25 |
| Total Current Assets | 50,000 | 75,000 | +25000 | +50 |


| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Increase or Decrease in 2003 Rs. | Percentage of Increase or Decrease in 2003 (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Fixed Assets <br> Total Assets Liabilities and Capital : | 4,90,000 | 6,25,000 | + 1,35,000 | + 27.55 |
|  | 5,40,000 | 7,00,000 | + 1,60,000 | + 29.62 |
|  | 37,000 | 50,000 | + 13,000 | + 35.13 |
|  | 37,000 | 50,000 | + 13,000 | + 35.13 |
| Long-Term Liabilities : <br> Debenture | 50,000 | $\begin{array}{r}60,000 \\ \hline 25000\end{array}$ | + 10,000 | + 20 |
| Long-Term Debts | 2,00,000 | 2,50,000 | + 50,000 | + 25 |
| Total Long-term Liabilities | 2,50,000 | 3,10,000 | +60,000 | +24 |
| Total Liabilities Capital and Reserve : | 2,87,000 | 3,60,000 | + 73,000 | + 25.43 |
|  |  |  |  |  |
| Preference Share Capital | 1,00,000 | 1,50,000 | + 50,000 | + 50 |
| Equity Share Capital | 1,25,000 | 1,60,000 | + 35,000 | + 28 |
| General Reserves | 28,000 | 30,000 | +2,000 | + 7.14 |
| Total Capital \& Reserve | 2,53,000 | 3,40,000 | + 87,000 | + 34.38 |
| Total Liabilities \& Capital | 5,40,000 | 7,00,000 | + 1,60,000 | + 29.62 |

## Interpretation

The total current assets of the company have increased by $50 \%$ in 2003 as compared to 2002. The current liabilities has increased only to the extent of $33.15 \%$. This indicates that the company will have no problem to meet the day-to-day expenses. It also observed that the current financial position of the concern has considerably increased.

The fixed assets has increased by $29.62 \%$ compared to 2002 . At the same time, long-term liabilities, share capital and reserve have considerably increased by $34.38 \%$. It shows that the company has taken up expansion plans in a big way.

## (2) Common Size Statements

In order to avoid the limitations of Comparative Statement, this type of analysis is designed. Under this method, financial statements are analysed to measure the relationship of various figures with some common base. Accordingly, while preparing the Common Size Profit and Loss Account, total sales is taken as common base and other items are expressed as a percentage of sales. Like this, in order to prepare the Common Size Balance Sheet, the total assets or total liabilities are taken as common base and all other items are expressed as a percentage of total assets and liabilities.

## Illustration: 5

From the following particulars of AVS Ltd., for the year 2002 and 2003, you are required to prepare a comparative Income Statement :

Statement of Profit and Loss Account

| Particulars | 2002 <br> $R s$. | 2003 <br> $R s$. |
| :--- | :---: | :---: |
| Net Sales | 4,000 | 5,000 |
| Less : Cost of Goods Sold | 3,000 | 3,750 |
| Gross Profit | 1,000 | 1,000 |
|  |  |  |
| Office \& Administrative Expenses | 200 | 250 |
| Selling \& Distribution Expenses | 225 | 300 |
| Total Operating Expenses | 425 | 550 |
|  | 575 | 700 |

Solution:
Common Size Income Statement

| Particulars | 2002 <br> $R s$ | Percentage <br> $(\%)$ | 2003 <br> Rs. | Percentage <br> $(\%)$ |
| :--- | ---: | ---: | :---: | :---: |
| Net sales | 4,000 | 100 | 5000 | 100 |
| Less: Cost of Goods Sold | 3,000 | 75 | 3750 | 75 |
| Gross Profit | 1,000 | 25 | 1250 | 25 |
| Less : Operating Expenses : |  |  |  |  |
| $\quad$ Office and Administrative Expenses | 100 | 2.5 | 100 | 2 |
| $\quad$ Selling and Distribution Expenses | 150 | 3.75 | 200 | 4 |
| $\quad$ Total Operating Expenses | 250 | 6.25 | 300 | 6 |
| Net Profit | 750 | 18.75 | 950 | 19 |

## Illustration: 6

From the following Balance Sheet, prepare a Common Size Statement:
Balance Sheet

| Liabilities | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Assets | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Share Capital | 2,64,000 | 2,80,000 | Cash in Hand | 10,000 | 10,750 |
| Current Liabilities | 65,000 | 70,000 | Cash at Bank | 3,500 | 5,000 |
| Long-term Debt | 1,00,000 | 87,500 | Bills Receivable | 22,500 | 22,750 |
| Bills Payable | 12,500 | - | Sundry Debtors | 90,000 | 85,000 |
| Sundry Creditors | 10,000 | 16,000 | Inventories | 70,000 | 83,000 |
| Bank Overdraft | 50,000 | 71,500 | Fixed Assets | 3,00,000 | 3,07,500 |
|  |  |  | Prepaid Expenses | 5,500 | 10,500 |
|  | 5,01,500 | 5,25,000 |  | 5,01,500 | 5,25,000 |

## Solution:

Common Size Balance Sheet

| Particulars | 2002 <br> $R s$. | Percentage <br> $(\%)$ | 2003 <br> $R s$. | Percentage <br> $(\%)$ |
| :--- | ---: | ---: | ---: | ---: |
| Assets : |  |  |  |  |
| Current Assets : |  |  |  |  |
| Cash in Hand | 10,000 | 1.99 | 10,750 | 2.05 |
| Cash at Bank | 3,500 | 0.69 | 5,000 | 0.95 |
| Sundry Debtors | 90,000 | 17.95 | 85,000 | 16.29 |
| Inventories | 70,000 | 13.96 | 83,000 | 15.81 |
| Bills Receivable | 22,500 | 4.48 | 22,750 | 4.3 |
| Prepaid Expenses | 5,500 | 1.09 | 10,500 | 2.00 |
| Total Current Assets | $2,01,500$ | 40.18 | $2,17,500$ | 41.43 |
| Fixed Assets | $3,00,000$ | 59.82 | $3,07,500$ | 58.57 |
| Total Assets | $5,01,500$ | $100 \%$ | $5,25,000$ | $100 \%$ |

## Common Size Balance Sheet

| Particulars | 2002 <br> Rs. | Percentage <br> $(\%)$ | 2003 <br> Rs. | Percentage <br> $(\%)$ |
| :--- | ---: | ---: | ---: | ---: |
| Liabilities \& Capital : |  |  |  |  |
| Current Liabilities | 65,000 | 12.96 | 70,000 | 13.33 |
| Bills Payable | 12,500 | 2.50 | - | - |
| Sundry Creditors | 10,000 | 1.99 | 16,000 | 3.05 |
| Bank Overdraft | 50,000 | 9.97 | 71,500 | 13.62 |
| Total Current Liabilities : | $1,37,500$ | 27.42 | $1,57,500$ | 30 |
| Long-Term Liabilities : |  |  |  |  |
| Long-Term Debts <br> Capital and Reserve : <br> Share Capital | $1,00,000$ | 19.94 | 87,500 | 16.66 |
| Total Liabilities | $2,64,000$ | 52.64 | $2,80,000$ | 53.34 |

## Illustration: 7

From the following Profit and Loss account and Balance sheet, you are required to prepare (a) Comparative Income Statements (b) Comparative Balance sheet (c) Common size Income Statement and (d) Common size Balance sheet.

Profit and Loss Account

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\left.\begin{array}{c} \text { To opening Stock } \\ \text { of Materials } \end{array}\right]$ | 25,000 | 30,000 | By Net Sales | 2,00,000 | 2,25,000 |
| To Purchases | 1,00,000 | 1,25,000 | By Closing Stock | 25,000 | 30,000 |
| To Direct Wages | 15,000 | 17,000 | By Non-Operating 7 |  |  |
| To Freight and Carriage | 2,000 | 3,000 | Income 5 | 10,000 | 15,000 |
| $\left.\begin{array}{l}\text { To Other Factory } \\ \text { Expenses }\end{array}\right]$ | 1,000 | 2,000 |  |  |  |



Balance Sheet as on 31st Dec.......

| Liabilities | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Assets | $\begin{gathered} 2002 \\ R s . \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bills Payable | 5,000 | 7,000 | Cash in hand | 3,000 | 5,000 |
| Sundry Creditors | 10,000 | 15,000 | Cash at Bank | 10,000 | 20,000 |
| Provision for Tax | 7,000 | 10,000 | Bills Receivable | 7,000 | 10,000 |
| Proposed Dividend | 5,000 | 8,000 | Sundry Debtors | 10,000 | 15,000 |
| Bank Overdraft | 10,000 | 10,000 | Stock in Trade | 20,000 | 25,000 |
| Debenture | 50,000 | 60,000 | Land \& Buildings | 2,00,000 | 2,50,000 |
| Preference Share |  |  | Goodwill | 1,00,000 | 1,25,000 |
| Capital | 1,00,000 | 1,50,000 | Furniture \& Fixtures | 40,000 | 50,000 |
| Equity Share Capital | 1,25,000 | 1,60,000 | Plant \& Machinery | 1,50,000 | 2,00,000 |
| Long-Term Loans | 2,00,000 | 2,50,000 |  |  |  |
| General Reserve | 28,000 | 30,000 |  |  |  |
|  | 5,40,000 | 7,00,000 |  | 5,40,000 | 7,00,000 |

## Solution:

(A) Comparative Income Statement For the year ending

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Increase or <br> Decrease in 2003 Rs. | Percentage of Increase or Decrease in 2003 |
| :---: | :---: | :---: | :---: | :---: |
| Opening stock of Raw Material Add: Purchases | $\begin{array}{r} 25,000 \\ 1,00,000 \\ \hline \end{array}$ | $\begin{array}{r} 30,000 \\ 1,25,000 \end{array}$ | $\begin{array}{r} +5,000 \\ +25,000 \\ \hline \end{array}$ | $\begin{aligned} & +20 \% \\ & +25 \% \end{aligned}$ |
|  | $\begin{array}{r} 1,25,000 \\ 2,000 \\ \hline \end{array}$ | $\begin{array}{r} 1,55,000 \\ 3,000 \\ \hline \end{array}$ | $\begin{array}{r} +30,000 \\ +1,000 \\ \hline \end{array}$ | $\begin{aligned} & +24 \% \\ & +50 \% \end{aligned}$ |
| Add : Freight and Carriage | $\begin{array}{r} 1,27,000 \\ 25,000 \end{array}$ | $\begin{array}{r} 1,58,000 \\ 30,000 \end{array}$ | $\begin{array}{r} +31,000 \\ +5,000 \end{array}$ | $\begin{aligned} & +24.40 \% \\ & +20 \% \\ & \hline \end{aligned}$ |
| Less : Closing Stock <br> Raw Materials Consumed (1) <br> Add : Direct Wages <br> Other Factory Expenses | $\begin{array}{r} 1,02,000 \\ 15,000 \\ 1,000 \end{array}$ | $\begin{array}{r} 1,28,000 \\ 17,000 \\ 2,000 \end{array}$ | $\begin{array}{r} +36,000 \\ +2,000 \\ +1,000 \end{array}$ | $\begin{aligned} & +35.29 \% \\ & +13.33 \% \\ & +50 \% \end{aligned}$ |
| Cost of Goods Sold (2) <br> Net Sales (3) <br> Gross Profit $(3-2)=(4)$ <br> (Net Sales - Cost of Goods Sold) <br> Less : Operating Expenses : <br> Office \& Administrative Expenses <br> Selling \& Distribution Expenses <br> Total Operating Expenses (5) | $\begin{aligned} & 1,18,000 \\ & 2,00,000 \end{aligned}$ | $\begin{aligned} & 1,47,000 \\ & 2,25,000 \\ & \hline \end{aligned}$ | $\begin{aligned} & +39,000 \\ & +25,000 \\ & \hline \end{aligned}$ | $\begin{aligned} & +33.05 \% \\ & +12.5 \% \\ & \hline \end{aligned}$ |
|  | 82,000 | 78,000 | -4,000 | -4.87\% |
|  | 5,000 7,000 | $\begin{array}{r} 6,000 \\ 8,000 \\ \hline \end{array}$ | $\begin{aligned} & +1,000 \\ & +1,000 \\ & \hline \end{aligned}$ | $\begin{aligned} & +20 \% \\ & +14.28 \% \\ & \hline \end{aligned}$ |
|  | 12,000 | 14,000 | + 2,000 | + $16.66 \%$ |


| Net Operating Profit (4-5) $=(6)$ | 70,000 | 64,000 | $-6,000$ | $-8.57 \%$ |
| :--- | ---: | ---: | ---: | :--- |
| (Gross Profit - Net Operating Profit) |  |  |  |  |
| Add: Non-Operating Income | 10,000 | 15,000 | $+5,000$ | $+50 \%$ |
| Total Operating Income (7) <br> Less: Non-Operating Expenses | 80,000 | 79,000 | $-1,000$ | $-1.25 \%$ |
| Net Profit (8) | 5,000 | 7,000 | $+2,000$ | $+40 \%$ |
|  | 75,000 | 72,000 | $-3,000$ | $-4 \%$ |

(B) Comparative Balance sheet
as on 311st . . . . . .

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Increase or <br> Decrease in 2003 Rs. | Percentage of Increase or Decrease in 2003 |
| :---: | :---: | :---: | :---: | :---: |
| Assets : |  |  |  |  |
| Liquid Assets |  |  |  |  |
| Cash in hand | 3,000 | 5,000 | + 2,000 | + 66.66\% |
| Cash at Bank | 10,000 | 20,000 | + 10,000 | + $10 \%$ |
| Bills Receivable | 7,000 | 10,000 | + 3,000 | + 42.85\% |
| Sundry Debtors | 10,000 | 15,000 | + 5,000 | + 50\% |
| Total Liquid Assets (1) | 30,000 | 50,000 | + 20,000 | + $66.66 \%$ |
| Add : Stock-in-trade | 20,000 | 25,000 | + 5,000 | + $25 \%$ |
|  |  |  |  |  |
|  |  |  |  |  |
| Land and Buildings | 2,00,000 | 2,50,000 | + 50,000 | + $25 \%$ |
| Plant and Machinery | 1,50,000 | 2,00,000 | + 50,000 | + 33.33\% |
| Goodwill | 1,00,000 | 1,25,000 | + 25,000 | + $25 \%$ |
| Furniture and Fixtures | 40,000 | 50,000 | + 10,000 | + $25 \%$ |
| Total Fixed Assets (3) | 4,90,000 | 6,25,000 | + 1,35,000 | + $27.55 \%$ |
| Total Assets ( $2+3$ ) $=(4)$ | 5,40,000 | 7,00,000 | + 1,60,000 | + 29.62\% |
| $\left.\begin{array}{c} \text { (Total Current Assets }+ \\ \text { Fixed Assets) } \end{array}\right]$ |  |  |  |  |
| Liabilities and Capital Current Liabilities : |  |  |  |  |
|  |  |  |  |  |
| Bills Payable | 5,000 | 7,000 | + 2,000 | + 40\% |
| Sundry Creditors | 10,000 | 15,000 | + 5,000 | +50\% |
| Bank Overdraft | 10,000 | 10,000 | - | - |
| Provision for tax | 7,000 | 10,000 | + 3,000 | + 42.85\% |
| Proposed Dividend | 5,000 | 8,000 | +3,000 | + $60 \%$ |
| Total Current Liabilities (1) | 37,000 | 50,000 | + 13,000 | + $35.13 \%$ |
| Long-Term Liabilities : |  |  |  |  |
| Debenture | 50,000 | 60,000 | + 10,000 | + $20 \%$ |
| Long-Term Loans | 2,00,000 | 2,50,000 | + 50,000 | + $25 \%$ |
| Total Long-Term Liabilities (2) | 2,50,000 | 3,10,000 | + 60,000 | + $24 \%$ |
| Total Liabilities ( $2+1$ ) $=(3)$ | 2,87,000 | 3,60,000 | + 73,000 | + $25.45 \%$ |
| Capital and Reserve : |  |  |  |  |
| Preference Share Capital | 1,00,000 | 1,50,000 | + 50,000 | + $50 \%$ |
| Equity Share Capital | 1,25,000 | 1,60,000 | + 35,000 | + $28 \%$ |
| General Reserve | 28,000 | 30,000 | + 2,000 | + $7.14 \%$ |
| Total Shareholders Fund (4) | 2,53,000 | 3,40,000 | +87,000 | + 34.38\% |
| $\left.\begin{array}{r}\text { Total Liabilities and Capital (5) } \\ =(3+4)\end{array}\right]$ | 5,40,000 | 7,00,000 | +1,60,000 | + $29.62 \%$ |

(C) Common Size Income Statements

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | Pencentage (\%) | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Percentage (\%) |
| :---: | :---: | :---: | :---: | :---: |
| Opening stock of Raw Material | 25,000 | 12.5\% | 30,000 | 13.33\% |
| Add : Purchases | 1,00,000 | 50\% | 1,25,000 | 55.55\% |
| Freight and Carriage | 2,000 | 1\% | 3,000 | 1.33\% |
|  | 1,27,000 | 63.5\% | 1,58,000 | 70.22\% |
| Less : Closing Stock | 25,000 | 12.5\% | 30,000 | 13.33\% |
| Raw Materials Consumed (1) | 1,02,000 | 51\% | 1,28,000 | 56.88\% |
| Add: Direct Wages | 15,000 | 7.5\% | 17,000 | 7.55\% |
| Other Factory Expenses | 1,000 | 0.5\% | 2,000 | 0.88\% |
| Cost of Goods Sold (2) | 1,18,000 | 59\% | 1,47,000 | 65.33\% |
| Gross Profit (4) | 82,000 | 41\% | 78,000 | 34.67\% |
| Net Sales (3) | 2,00,000 | 100\% | 2,25,000 | 100\% |
| Less : Operating Expenses : |  |  |  |  |
| Office \& Administrative Expenses | 5,000 | 2.5\% | 6,000 | 2.66\% |
| Selling \& Distribution Expenses | 7,000 | 3.5\% | 8,000 | 3.55\% |
| Total Operating Expenses (5) | 12,000 | 6\% | 14,000 | 6.22\% |
| Net Operating Profit (6) | 70,000 | 35\% | 64,000 | 28.44\% |
| (Gross Profit - Total Operating Expenses) Add : Non-Operating Income |  |  |  |  |
| Add: Non-Operating Income | 10,000 | 5\% | 15,000 | 6.66\% |
|  | 80,000 | 40\% | 79,000 | 35.11\% |
| Less : Non-Operating Expenses | 5;000 | 2.5\% | 7,000 | 3.11\% |
| Net Profit (7) | 75,000 | 37.5\% | 72,000 | 32\% |
| Current Liabilities : |  |  |  |  |
| Short-Term Loan | 65,000 | 12.96\% | 70,000 | 13.33\% |
| Bills Payable | 12,500 | 2.50\% | - | - |
| Sundry Creditors | 10,000 | 1.99\% | 16,000 | 3.05\% |
| Bank Overdraft | 50,000 | 9.97\% | 71,500 | 13.62\% |
| Total Current Liabilities | 1,37,500 | 27.42\% | 1,57,500 | 30\% |
| Long-Term Liabilities: |  |  |  |  |
| Long-Term debts | 1,00,000 | 19.94\% | 87,500 | 16.66\% |
| Capital and Reserve : |  |  |  |  |
| Share Capital | 2,64,000 | 52.64\% | 2,80,000 | 53.34\% |
| Total Liabilities and Capital | 5,01,500 | 100\% | 5,25,000 | 100\% |

(D) Common Size Balance Sheet

| Particulars | 2002 <br> Rs. | Percentage <br> $(\%)$ | R <br> Rs. | Percentage <br> $(\%)$ |
| :--- | ---: | ---: | ---: | ---: |
| Assets |  |  |  |  |
| Liquid Assets: |  |  |  |  |
| Cash in hand | 3,000 | $0.55 \%$ | 5,000 | $0.71 \%$ |
| Cash at Bank | 10,000 | $1.85 \%$ | 20,000 | $2.85 \%$ |
| Bills Receivable | 7,000 | $1.29 \%$ | 10,000 | $1.42 \%$ |
| Sundry Debtors | 10,000 | $1.85 \%$ | 15,000 | $2.14 \%$ |
| Total Liquid Assets (1) | 30,000 | $5.55 \%$ | 50,000 | $7.14 \%$ |
| Add : Stock in trade | 20,000 | $3.70 \%$ | 25,000 | $3.57 \%$ |
| Total Current Assets (2) | 50,000 | $9.25 \%$ | 75,000 | $10.72 \%$ |


| Fixed Assets: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Land and Building | 2,00,000 | 37.03\% | 2,50,000 | 35.71\% |
| Plant and Machinery | 1,50,000 | 27.78\% | 2,00,000 | 28.57\% |
| Goodwill | 1,00,000 | 18.50\% | 1,25,000 | 17.85\% |
| Furniture and Fixtures | 40,000 | 7.40\% | 50,000 | 7.14\% |
| Total Fixed Assets (3) | 4,90,000 | 90.75\% | 6,25,000 | 89.28\% |
| Total Assets ( $2+3$ ) $=(4)$ | 5,40,000 | 100 | 7,00,000 | 100\% |
| (Current Assets + Fixed Assets) |  |  |  |  |
| Liabilities and Capital: |  |  |  |  |
| Current Liabilities: |  |  |  |  |
| Bills Payable | 5,000 | 0.92\% | 7,000 | 1\% |
| Sundry Creditors | 10,000 | 1.85\% | 15,000 | 2.14\% |
| Bank Overdraft | 10,000 | 1.85\% | 10,000 | 1.42\% |
| Provision for Tax | 7,000 | 1.29\% | 10,000 | 1.42\% |
| Proposed Dividend | 5,000 | 0.92\% | 8,000 | 1.14\% |
| Total Current Liabilities (1) | 37,000 | 6.85\% | 50,000 | 7.14\% |
| Long-Term Liabilities: |  |  |  |  |
| Debenture | 50,000 | 9.25\% | 60,000 | 8.57\% |
| Long-Term Loan | 2,00,000 | 37.03\% | 2,50,000 | 35.71\% |
| Total Liabilities (2) | 2,87,000 | 53.14\% | 3,60,000 | 51.43\% |
| Capital and Reserve: |  |  |  |  |
| Preference Share Capital | 1,00,000 | 18.51\% | 1,50,000 | 21.42\% |
| Equity Share Capital | 1,25,000 | 23.14\% | 1,60,000 | 22.85\% |
| General Reserve | 28,000 | 5.18\% | 30,000 | 4.28\% |
| Total Share holders Fund (3) | 2,53,000 | 46.85\% | 3,40,000 | 48.57\% |
| Total Liabilities \& Capital ( $2+3$ ) $=(4)$ | 5,40,000 | 100\% | 7,00,000 | 100\% |

## Interpertations

From the above statements, it is observed that the sales have gone up in 2003, the rate of increase to the extent of $34.67 \%$. The cost of goods sold and its percentage increased by $65.33 \%$. Administrative and selling and distribution expenses have been increased by $2.66 \%$ and $3.55 \%$ respectively. The rate of net profit is also increased to the extent of $32 \%$. This indicates the overall profitability of the concern is good.

The total current assets of the company has increased by $10.72 \%$. While current liabilities have increased only to the extent of $7.14 \%$. This indication of liquidity position of the firm is highly satisfactory. The total fixed assets have increased by $89.28 \%$ but at the same time long-term liabilities, capital and reserves have increased by $48.57 \%$. It is observed that overall financial position of the business concern is good.

## (3) Trend Analysis

Trend Analysis is one of the important technique which is used for analysis and interpretations of financial statements. While applying this method, it is necessary to select a period for a number of years in order to ascertain the percentage relationship of various items in the financial statements comparing with the items in base year. When a trend is to be determined by applying this method, earliest year or first year is taken as the base year. The related items in the base year are taken as 100 and based on this trend percentage of corresponding figures of financial statements in the other years are concluded. This analysis is useful in framing suitable policies and forecasting in future also.

## Illustration: 8

Calculate the trend percentage from the following figures of Ram \& Co. Ltd. The year 1999 is taken as the base year.

| Year | Sales | Cost of Goods Sold Rs. | Gross Profit Rs. |
| :---: | :---: | :---: | :---: |
| 1999 | 2000 | 1400 | 600 |
| 2000 | 2500 | 1800 | 700 |
| 2001 | 3000 | 2200 | 800 |
| 2002 | 3500 | 2600 | 900 |
| 2003 | 4000 | 3000 | 1000 |

Solution:
Ram \& Co. Ltd.,
Trend Percentage

| Year | Sale |  | Cost of Goods Sold |  | Gross Profit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Amount <br> Rs. | Trend (\%) <br> Percentage | Amount <br> Rs. | Trend (\%) <br> Percentage | Amount <br> Rs. | Trend (\%) <br> Percentage |
| 1999 | 2000 | 100 | 1400 | 100 | 600 | 100 |
| 2000 | 2500 | 125 | 1800 | 128.57 | 700 | 116.66 |
| 2001 | 3000 | 150 | 2200 | 157.14 | 800 | 133.33 |
| 2002 | 3500 | 175 | 2600 | 185.71 | 900 | 150 |
| 2003 | 4000 | 200 | 3000 | 214.28 | 1000 | 166.66 |

## (4) Fund Flow Analysis

Fund Flow Analysis is one of the important methods for analysis and interpretations of financial statements. This is the statement which acts as a supplementary statement to the profit and loss account and balance sheet. Fund Flow Analysis helps to determine the changes in financial position on working capital basis and on cash basis. It also reveals the information about the sources of funds and has been utilized or employed during particular period.

## (5) Ratio Analysis

Ratio Analysis is one of the important techniques which is used to measure the establishment of relationship between the two interrelated accounting figures in financial statements. This analysis helps to Management for decision making. Ratio Analysis is an effective tool which is used to ascertain the liquidity and operational efficiency of the concern.

## QUestions

1. What is meant by Financial Analysis?
2. What do you understand by financial statements?
3. Explain briefly the nature and scope of financial statements.
4. Discuss the important objectives of financial statements.
5. What are limitations of financial statements?
6. Explain the analysis and interpretation of financial statements.
7. Explain different types of analysis and interpretations.
8. Write short notes on :
(a) Horizontal Analysis.
(b) Vertical Analysis.
(c) External and Internal Analysis.
9. Explain in brief the procedure for preparing the comparative financial statements.
10. Draw a specimen form of Methodical Classification of Income Statements and Balance Sheet.
11. Discuss the different techniques or tools of Financial Analysis.
12. What do you understand by Trend Analysis?
13. Write a brief note on Common Size Statements.
14. What is Fund Flow Analysis?

## PRACTICAL PROBLEMS

(1) The following are the income statements of ABC Ltd. Madras for the years 2002 and 2003 convert into a Comparative Income Statements and Comment on the Profitability of the Company.

Income Statements

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Opening Stock | 1,70000 | 4,00,000 | By Sales | 20,00,000 | 24,00,000 |
| To Purchases | 10,00,000 | 11,00,000 | By Closing stock | 4,00,000 | 4,50,000 |
| To Wages | 1,20,000 | 1,60,000 | By Income from 7 |  |  |
| To Salaries | 84,000 | 1,28,000 | Investment $]$ | 24,000 | 30,000 |
| To Rent \& Rates | 70,000 | 80,000 | By Dividend 7 |  |  |
| To Depreciation | 80,000 | 1,20,000 | Received 5 | 10,000 | 15,000 |
| To Selling Expenses | 24,000 | 24,000 |  |  |  |
| To Discount Allowed | 10,000 | 10,000 |  |  |  |
| To Loss on sales of Plant | - | 16,000 |  |  |  |
| To Interest Paid | 24,000 | 28,000 |  |  |  |
| To Net Profit | 8,52,000 | 8,25,000 |  |  |  |
|  | 24,34,000 | 28,95,000 |  | 24,34,000 | 28,95,000 |

(2) The following are the particulars of Balance sheet for the year 2002 and 2003. You are required to convert into a Comparative Balance Sheet :

| Particulars | 2002 | 2003 |
| :---: | :---: | :---: |
| Equity Share Capital | 8,00,000 | 20,00,000 |
| Preference Share Capital | 4,00,000 | 4,00,000 |
| General Reserve | 2,00,000 | 5,00,000 |
| Accounts Payable | 2,00,000 | 4,00,000 |
| Outstanding Expenses | 1,00,000 | 1,00,000 |
| Profit and Loss Account | 4,00,000 | 6,00,000 |
|  | 21,00,000 | 40,00,000 |
| Fixed Assets | 8,00,000 | 20,00,000 |
| Investments | 6,00,000 | 2,00,000 |
| Bills Receivable | 4,00,000 | 8,00,000 |
| Stock | 2,00,000 | 8,00,000 |
| Cash at Bank | 50,000 | 1,00,000 |
| Cash in Hand | 50,000 | 1,00,000 |
|  | 21,00,000 | 40,00,000 |
| (3) From the following Balance, Prepare a Common Size Statement: |  |  |
| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| Asset: |  |  |
| Cash in Hand | 20,000 | 21,500 |
| Cash at Bank | 7,000 | 10,000 |
| Sundry Debtors | 1,80,000 | 1,70,000 |
| Inventories | 1,40,000 | 1,66,000 |
| Bills Receivable | 45,000 | 45,500 |
| Prepaid Expenses | 11,000 | 21,000 |

Fixed Assets
Total Assets
Liabilities \& Capital :
Share Capital
Short-term Loans
Long-Term Debt
Bills Payable
Sundry Creditors
Bank Overdraft

| $6,00,000$ | $1,05,000$ |
| ---: | ---: |
| $10,03,000$ | $10,05,000$ |
|  |  |
| $5,28,000$ | $5,60,000$ |
| $1,30,000$ | $1,40,000$ |
| $2,00,000$ | $1,75,000$ |
| 25,000 | -0 |
| 20,000 | 32,000 |
| $1,00,000$ | $1,43,000$ |
| $10,03,000$ | $10,05,000$ |

(4) From the following Income Statements, you are required to Convert into Common Size Statement and comment on the Prevailing Conditions :

Income Statement

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: |
| Sales | 16,400 | 19,500 |
| Less : Sales Return | 400 | 450 |
| Net Sales | 16,000 | 19,100 |
| Less : Cost of Sales | 13,500 | 12,100 |
| Gross Profit | 2,500 | 7,000 |
| Less: Operating Expenses: |  |  |
| Administrative \& General Expenses | 750 | 1,550 |
| Selling \& Distribution Expenses | 1,320 | 2,670 |
| Total Operating Expenses | 2,070 | 4,220 |
| Operating Profit | 430 | 6,780 |
| Add: Non-Operating Income | 50 | 175 |
| Total Income | 480 | 6,955 |
| Less: Non-Operating Expenses | 45 | 300 |
| Net Profit for the year | 435 | 6,655 |

(5) Following income statement of a business are given for the year ending $31^{\text {s }}$ December 2002 and 2003, rearrange them in a comparative form and make comments.

Income Statements

| Particulars | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ | Particulars | $\begin{gathered} 2002 \\ R s . \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Rs. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Cost of goods sold | 9,00,000 | 9,50,000 | By Sales | 15,25,000 | 17,00,000 |
| $\left.\begin{array}{l} \text { To Administrative } \\ \text { Expenses } \end{array}\right]$ | 93,250 | 95,980 | $\left.\begin{array}{c}\text { By Interest and } \\ \text { Dividend }\end{array}\right]$ | 7,500 | 6,200 |
| To Selling Expenses | 1,90,000 | 2,09,000 | By Profit from |  |  |
| To Interest Paid | 8,000 | 7,000 | sale of old assets ${ }^{-}$ | 6,000 | 8,000 |
| $\left.\begin{array}{l}\text { To Loss on Sale of } \\ \text { Machinery }\end{array}\right]$ | 2,500 | 800 |  |  |  |
| To Income Tax | 85,000 | 1,68,000 |  |  |  |
| To Net Profit | 2,59,750 | 2,83,420 |  |  |  |
|  | 15,38,500 | 17,14,200 |  | 15,38,500 | 17,14,200 |

[Ans : Gross profit and Net profit have improved satisfactorily]
(6) From the following information, you are required to prepare a common size statement and make comments.

Balance Sheet

| Liabilities | 2002 <br> $R s$. | 2003 <br> $R s$. | Assets <br> $R s$. | 2002 <br> $R s$. |  |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Sundry Creditors | 42,000 | $1,54,000$ | Cash | 27,000 | 72,000 |
| Other liabilities | 78,000 | 62,000 | Sundry Debtors | $2,20,000$ | $2,26,000$ |
| Fixed liabilities | $2,25,000$ | $3,18,000$ | Stock | $1,00,000$ | $1,74,000$ |
| Capital | $6,58,000$ | $4,93,000$ | Prepaid Expenses | 11,000 | 21,000 |
|  |  |  | Other Current Assets | 10,000 | 21,000 |
|  |  |  | Fixed Assets | $6,35,000$ | $5,13,000$ |

(7) The following information is the Income Statement and Balance Sheet of Raman \& Co. Ltd. for the year 2002 and 2003, you are required to prepare common size income statement and Balance sheet for the two years.
Dr.

| Particulars | $\begin{array}{c}2002 \\ R s .\end{array}$ | $\begin{array}{c}2003 \\ R s .\end{array}$ | Particulars | $\begin{array}{c}2002 \\ R s .\end{array}$ | $\begin{array}{c}2003 \\ R s .\end{array}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| To Cost of Sales | $2,40,000$ | $3,50,000$ | By Sales | $4,00,000$ | $5,00,000$ |
| To Gross Profit c/d | $1,60,000$ | $1,50,000$ |  |  |  |$)$

Balance Sheet

| Liabilities | 2002 <br> $R s$. | 2003 <br> $R s$. | Assets | 2002 <br> $R s$. | 2003 <br> $R s$ |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Share Capital | $2,00,000$ | $3,00,000$ | Buildings | $4,00,000$ | $4,00,000$ |
| Reserves | $6,00,000$ | $7,00,000$ | Machinery | $6,00,000$ | $10,00,000$ |
| 10\% Debentures | $2,00,000$ | $3,00,000$ | Stock | $2,00,000$ | $3,00,000$ |
| Creditors | $3,00,000$ | $5,00,000$ | Debtors | $2,00,000$ | $2,50,000$ |
| Bills Payable | $1,00,000$ | 80,000 | Cash at Bank | 10,000 | 50,000 |
| Tax Payable | $1,00,000$ | $1,20,000$ |  |  |  |

[Ans : Gross profit 30\%; Operating profit 18\%; Net Profit 24\%; Total Current Assets 30\%; Fixed Assets 70\%; Current
Liabilities 35\%]
(8) From the following profit and loss account and Balance sheets for the year ended $31^{4}$ Dec. 2002 and 2003, prepare comparative income statements and comparative Balance sheet.

| Particulars | 2002 <br> Rs. | 2003 <br> Rs. | Particulars | 2002 <br> $R s$. | 2003 <br> Rs. |
| :--- | ---: | ---: | :--- | :--- | :---: |
| To Cost of Sales | $3,00,000$ | $3,75,000$ | By Sales | $4,00,000$ | $5,00,000$ |
| To Office \& | 10,000 | 10,000 |  |  |  |
| Administrative Expen. | 15,000 | 20,000 |  |  |  |
| To Selling Expenses | 75,000 | 95,000 |  | $4,00,000$ | $5,00,000$ |
| To Net Profit | $4,00,000$ | $5,00,000$ |  |  |  |

Balance Sheet

| Liabilities | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { R.s. } \end{gathered}$ | Assets | $\begin{gathered} 2002 \\ \text { Rs. } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { R. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Bills Payable | 25,000 | 37,500 | Cash | 50,000 | 70,000 |
| Sundry Creditors | 75,000 | 1,00,000 | Debtors | 1,00,000 | 1,50,000 |
| Tax Payable | 50,000 | 75,000 | Stock | 1,00,000 | 1,50,000 |
| 10\% Debentures | 50,000 | 75,000 | Land | 50,000 | 50,000 |
| 10\% Preference Shares | 1,50,000 | 1,50,000 | Buildings | 1,50,000 | 1,35,000 |
| Equity Shares | 2,00,000 | 2,00,000 | Plant | 1,50,000 | 1,35,000 |
| Reserves | 1,00,000 | 1,22,500 | Furniture | 50,000 | 70,000 |
|  | 6,50,000 | 7,60,000 |  | 6,50,000 | 7,60,000 |

