

## UNIT –II

### RATIO ANALYSIS

Subject Name : Management Accounting  
Subject Code : CCM 53

Class : III B.COM A & B

#### UNIT - II

Ratio Analysis : Definition – Significance and Limitations – Classification – Liquidity, Solvency, Turnover and Profitability ratios – Computation of Ratios from Financial Statements – Preparation of Financial Statement from Ratios.

#### Meaning of Ratio Analysis:

Ratio analysis refers to the analysis and interpretation of the figures appearing in the financial statements (i.e., Profit and Loss Account, Balance Sheet and Fund Flow statement etc.).

It is a process of comparison of one figure against another. It enables the users like shareholders, investors, creditors, Government, and analysts etc. to get better understanding of financial statements.

Khan and Jain define the term ratio analysis as “the systematic use of ratios to interpret the financial statements so that the strengths and weaknesses of a firm as well as its historical performance and current financial conditions can be determined.”

Ratio analysis is a very powerful analytical tool useful for measuring performance of an organisation. Accounting ratios may just be used as symptom like blood pressure, pulse rate, body temperature etc. The physician analyses these

information to know the causes of illness. Similarly, the financial analyst should also analyse the accounting ratios to diagnose the financial health of an enterprise.

Generally, ratio analysis involves four steps:

- (i) Collection of relevant accounting data from financial statements.
- (ii) Constructing ratios of related accounting figures.
- (iii) Comparing the ratios thus constructed with the standard ratios which may be the corresponding past ratios of the firm or industry average ratios of the firm or ratios of competitors.
- (iv) Interpretation of ratios to arrive at valid conclusions.

#### **Advantages of Ratio Analysis:**

Ratio analysis is widely used as a powerful tool of financial statement analysis. It establishes the numerical or quantitative relationship between two figures of a financial statement to ascertain strengths and weaknesses of a firm as well as its current financial position and historical performance. It helps various interested parties to make an evaluation of certain aspect of a firm's performance.

The following are the principal advantages of ratio analysis:

##### ***1. Forecasting and Planning:***

The trend in costs, sales, profits and other facts can be known by computing ratios of relevant accounting figures of last few years. This trend analysis with the help of ratios may be useful for forecasting and planning future business activities.

## *2. Budgeting:*

Budget is an estimate of future activities on the basis of past experience. Accounting ratios help to estimate budgeted figures. For example, sales budget may be prepared with the help of analysis of past sales.

## *3. Measurement of Operating Efficiency:*

Ratio analysis indicates the degree of efficiency in the management and utilisation of its assets. Different activity ratios indicate the operational efficiency. In fact, solvency of a firm depends upon the sales revenues generated by utilizing its assets.

## *4. Communication:*

Ratios are effective means of communication and play a vital role in informing the position of and progress made by the business concern to the owners or other parties.

## *5. Control of Performance and Cost:*

Ratios may also be used for control of performances of the different divisions or departments of an undertaking as well as control of costs.

## *6. Inter-firm Comparison:*

Comparison of performance of two or more firms reveals efficient and inefficient firms, thereby enabling the inefficient firms to adopt suitable measures for improving their efficiency. The best way of inter-firm comparison is to compare the relevant ratios of the organisation with the average ratios of the industry.

### *7. Indication of Liquidity Position:*

Ratio analysis helps to assess the liquidity position i.e., short-term debt paying ability of a firm. Liquidity ratios indicate the ability of the firm to pay and help in credit analysis by banks, creditors and other suppliers of short-term loans.

### *8. Indication of Long-term Solvency Position:*

Ratio analysis is also used to assess the long-term debt-paying capacity of a firm. Long-term solvency position of a borrower is a prime concern to the long-term creditors, security analysts and the present and potential owners of a business. It is measured by the leverage/capital structure and profitability ratios which indicate the earning power and operating efficiency. Ratio analysis shows the strength and weakness of a firm in this respect.

### *9. Indication of Overall Profitability:*

The management is always concerned with the overall profitability of the firm. They want to know whether the firm has the ability to meet its short-term as well as long-term obligations to its creditors, to ensure a reasonable return to its owners and secure optimum utilisation of the assets of the firm. This is possible if all the ratios are considered together.

### *10. Signal of Corporate Sickness:*

A company is sick when it fails to generate profit on a continuous basis and suffers a severe liquidity crisis. Proper ratio analysis can give signal of corporate sickness in advance so that timely measures can be taken to prevent the occurrence of such sickness.

### *11. Aid to Decision-making:*

Ratio analysis helps to take decisions like whether to supply goods on credit to a firm, whether bank loans will be made available etc.

### *12. Simplification of Financial Statements:*

Ratio analysis makes it easy to grasp the relationship between various items and helps in understanding the financial statements.

### **Limitations of Ratio Analysis:**

The technique of ratio analysis is a very useful device for making a study of the financial health of a firm. But it has some limitations which must not be lost sight of before undertaking such analysis.

Some of these limitations are:

#### *1. Limitations of Financial Statements:*

Ratios are calculated from the information recorded in the financial statements. But financial statements suffer from a number of limitations and may, therefore, affect the quality of ratio analysis.

#### *2. Historical Information:*

Financial statements provide historical information. They do not reflect current conditions. Hence, it is not useful in predicting the future.

#### *3. Different Accounting Policies:*

Different accounting policies regarding valuation of inventories, charging depreciation etc. make the accounting data and accounting ratios of two firms non-comparable.

#### *4. Lack of Standard of Comparison:*

No fixed standards can be laid down for ideal ratios. For example, current ratio is said to be ideal if current assets are twice the current liabilities. But this conclusion may not be justifiable in case of those concerns which have adequate arrangements with their bankers for providing funds when they require, it may be perfectly ideal if current assets are equal to or slightly more than current liabilities.

#### *5. Quantitative Analysis:*

Ratios are tools of quantitative analysis only and qualitative factors are ignored while computing the ratios. For example, a high current ratio may not necessarily mean sound liquid position when current assets include a large inventory consisting of mostly obsolete items.

#### *6. Window-Dressing:*

The term 'window-dressing' means presenting the financial statements in such a way to show a better position than what it actually is. If, for instance, low rate of depreciation is charged, an item of revenue expense is treated as capital expenditure etc. the position of the concern may be made to appear in the balance sheet much better than what it is. Ratios computed from such balance sheet cannot be used for scanning the financial position of the business.

#### *7. Changes in Price Level:*

Fixed assets show the position statement at cost only. Hence, it does not reflect the changes in price level. Thus, it makes comparison difficult.

#### *8. Causal Relationship Must:*

Proper care should be taken to study only such figures as have a cause-and-effect relationship; otherwise ratios will only be misleading.

#### *9. Ratios Account for one Variable:*

Since ratios account for only one variable, they cannot always give correct picture since several other variables such Government policy, economic conditions, availability of resources etc. should be kept in mind while interpreting ratios.

#### *10. Seasonal Factors Affect Financial Data:*

Proper care must be taken when interpreting accounting ratios calculated for seasonal business. For example, an umbrella company maintains high inventory during rainy season and for the rest of year its inventory level becomes 25% of the seasonal inventory level. Hence, liquidity ratios and inventory turnover ratio will give biased picture.

### Problem - 1

The following Trading and Profit and Loss Account of Fantasy Ltd. for the year 31-3-2000 is given below:

Particular	Rs.	Particular	Rs.
To Opening Stock	76,250	By Sales	5,00,000
“ Purchases	3,15,250	“ Closing stock	98,500
“ Carriage and Freight	2,000		
“ Wages	5,000		
“ Gross Profit b/d	2,00,000		
	<u>5,98,500</u>		<u>5,98,500</u>
To Administration expenses	1,01,000	By Gross Profit b/d	2,00,000
“ Selling and Dist. expenses	12,000	“ Non-operating incomes:	
“ Non-operating expenses	2,000	“ Interest on Securities	1,500
“ Financial Expenses	7,000	“ Dividend on shares	3,750
Net Profit c/d	84,000	“ Profit on sale of shares	750
	<u>2,06,000</u>		<u>2,06,000</u>

Calculate:

1. Gross Profit Ratio      2. Expenses Ratio      3. Operating Ratio
1. Net Profit Ratio      5. Operating (Net) Profit Ratio      6. Stock Turnover Ratio.

### Solution – 1 (Problem related to Revenue Ratio)

$$\begin{aligned}
 1. \quad \text{Gross Profit Margin} &= \frac{\text{Gross profit}}{\text{Sales}} \times 100 \\
 &= \frac{2,00,000}{5,00,000} \times 100 \\
 &= 40\%
 \end{aligned}$$

$$\begin{aligned}
 2. \quad \text{Expenses Ratio} &= \frac{\text{Op. Expenses}}{\text{Net Sales}} \times 100 \\
 &= \frac{1,13,000}{5,00,000} \times 100 \\
 &= 22.60\%
 \end{aligned}$$



$$\begin{aligned}
 3. \quad \text{Operating Ratio} &= \frac{\text{Cost of goods sold} + \text{Op. Expenses}}{\text{Net Sales}} \times 100 \\
 &= \frac{3,00,000 + 1,13,000}{5,00,000} \times 100 \\
 &= 82.60\%
 \end{aligned}$$

$$\begin{aligned}
 \text{Cost of Goods sold} &= \text{Op. stock} + \text{purchases} + \text{carriage and Freight} + \text{wages} - \text{Closing Stock} \\
 &= 76250 + 315250 + 2000 + 5000 - 98500 \\
 &= \text{Rs.} 3,00,000
 \end{aligned}$$

$$\begin{aligned}
 4. \quad \text{Net Profit Ratio} &= \frac{\text{Net Profit}}{\text{Net Sales}} \times 100 \\
 &= \frac{84,000}{5,00,000} \times 100 \\
 &= 16.8\%
 \end{aligned}$$

$$\begin{aligned}
 5. \quad \text{Operating Profit Ratio} &= \frac{\text{Op. Profit}}{\text{Net Sales}} \times 100 \\
 \text{Operating Profit} &= \text{Sales} - (\text{Op. Exp.} + \text{Admin Exp.}) \\
 &= \frac{87,000}{5,00,000} \times 100 \\
 &= 17.40\%
 \end{aligned}$$

6. Stock Turnover Ratio =  $\frac{\text{Cost of goods sold}}{\text{Avg. Stock}}$

$$= \frac{3,00,000}{87,375}$$

= 3.43 times

## Problem - 2

The Balance Sheet of Punjab Auto Limited as on 31-12-2002 was as follows:

Particular	Rs.	Particular	Rs.
Equity Share Capital	40,000	Plant and Machinery	24,000
Capital Reserve	8,000	Land and Buildings	40,000
8% Loan on Mortgage	32,000	Furniture & Fixtures	16,000
Creditors	16,000	Stock	12,000
Bank overdraft	4,000	Debtors	12,000
Taxation:		Investments (Short-term)	4,000
Current	4,000	Cash in hand	12,000
Future	4,000		
Profit and Loss A/c	12,000		
	1,20,000		1,20,000

From the above, compute (a) the Current Ratio, (b) Quick Ratio, (c) Debt-Equity Ratio, and (d) Proprietary Ratio.

## Solution – 2 (Problem related to Balance Sheet Ratio)

1. Current Ratio	=	$\frac{\text{Current Assets}}{\text{Current liabilities}}$	
		Current Assets = Stock + debtors + Investments (short term) + Cash In hand	
		Current Liabilities = Creditors + bank overdraft + Provision for Taxation (current & Future)	
		CA = 12000 + 12000 + 4000 + 12000	
		= 40,000	
		CL = 16000 + 4000 + 4000 + 4000	

= 28,000	
= <u>40,000</u> 28,000	
= <b>1.43 : 1</b>	

2. Quick Ratio =	<u>Quick Assets</u> Quick Liabilities	
	Quick Assets = Current Assets - Stock	
	Quick Liabilities = Current Liabilities – (BOD + PFT future)	
	QA = 40,000 – 12,000 = 28,000	
	QL = 28,000 – (4,000 + 4,000) = 20,000	
	= <u>28,000</u> 20,000	
	= <b>1.40 : 1</b>	

3. Debt – Equity Ratio =	<u>Long Term Debt (Liabilities)</u> Shareholders Fund	
	LTL = Debentures + long term loans	
	SHF = Eq. Sh. Cap. + Reserves & Surplus + Preference Sh. Cap. – Fictitious Assets	
	LTL = 32,000	
	SHF = 40,000 + 8,000 + 12,000 = 60,000	

= <u>32,000</u>	
60,000	
= <b>0.53 : 1</b>	

4. Proprietary Ratio =	<u>Shareholders' Funds</u>	
	Total Assets	
	SHF = Eq. Sh. Cap. + Reserves & Surplus + Preference Sh. Cap. – Fictitious Assets	
	Total Assets = Total Assets – Fictitious Assets	
	SHF = 40,000 + 8,000 + 12,000	
	= 60,000	
	TA = 1,20,000	
	= <u>60,000</u>	
	1,20,000	
	= <b>0.5 : 1</b>	

**Problem - 3 [Sau. Uni. T. Y., April, 2000]**

The details of Shreenath Company are as under:

Sales (40% cash sales)		15,00,000
Less: Cost of sales		<u>7,50,000</u>
	<b>Gross Profit:</b>	7,50,000
Less: Office Exp. (including int. on debentures)	1,25,000	
Selling Exp.	<u>1,25,000</u>	<u>2,50,000</u>
	<b>Profit before Taxes:</b>	5,00,000
Less: Taxes		<u>2,50,000</u>
	<b>Net Profit:</b>	2,50,000

Balance Sheet			
Particular	Rs.	Particular	Rs.
Equity share capital	20,00,000	Fixed Assets	55,00,000
10% Preference share capital	20,00,000	Stock	1,75,000
Reserves	11,00,000	Debtors	3,50,000
10% Debentures	10,00,000	Bills receivable	50,000
Creditors	1,00,000	Cash	2,25,000
Bank-overdraft	1,50,000	Fictitious Assets	1,00,000
Bills payable	45,000		
Outstanding expenses	5,000		
	64,00,000		64,00,000

Beside the details mentioned above, the opening stock was of Rs. 3,25,000. Taking 360 days of the year, calculate the following ratios; also discuss the position of the company:

(1) Gross profit ratio. (2) Stock turnover ratio. (3) Operating ratio. (4) Current ratio. (5) Liquid ratio. (6) Debtors ratio. (7) Creditors ratio. (8) Proprietary ratio. (9) Rate of return on net capital employed. (10) Rate of return on equity shares.

### Solution – 3 (Problem related to Composite Ratio)

1. Gross Profit Margin =	$\frac{\text{Gross profit}}{\text{Sales}}$	X 100
	$\frac{7,50,000}{15,00,000}$	X 100
	= 50%	

2. Stock Turnover Ratio =	$\frac{\text{Cost of goods sold}}{\text{Avg. Stock}}$
	Avg. stock = $\frac{\text{Opening Stock} + \text{Closing Stock}}{2}$
	COGS = Sales – GP
	$\frac{3,25,000 + 1,75,000}{2}$

AS = 2,50,000
COGS = 15,00,000 – 7,50,000
7,50,000
= <u>7,50,000</u>
2,50,000
= 3 times

3. Operating Profit Ratio =	<u>Op. Profit</u> Net Sales	X 100
	Operating Profit = Sales – (Op. Exp. + COGS.)	
	OP = 15,00,000 – (7,50,000 + 1,25,000 + 25,000)	
	= 6,00,000	
	(excluding Interest on Debentures)	
	= <u>6,00,000</u>	X 100
	15,00,000	
	= 40%	

4. Current Ratio =	<u>Current Assets</u> Current liabilities	
	Current Assets = Stock + debtors + Bills receivable + Cash	
	Current Liabilities = Creditors + bank overdraft + Bills payable + Outstanding expenses	
	CA = 1,75,000 + 3,50,000 + 50,000 + 2,25,000	
	= 8,00,000	

<b>CL = 1,00,000 + 1,50,000 + 45,000 + 5,000</b>	
<b>= 3,00,000</b>	
<b>= <u>8,00,000</u></b>	
<b>3,00,000</b>	
<b>= 2.67 : 1</b>	

<b>5. Quick Ratio / Liquid Ratio</b>	<b>=</b>	<u>Liquid Assets</u> Liquid Liabilities	
		(Liquid) Quick Assets = Current Assets - Stock	
		(Liquid) Quick Liabilities = Current Liabilities – BOD	
		QA = 8,00,000 – 1,75,000	
		= 6,25,000	
		QL = 3,00,000 – 1,50,000	
		= 1,50,000	
		<b>= <u>6,25,000</u></b>	
		<b>1,50,000</b>	
		<b>= 4.17 : 1</b>	

<b>6. Debtors Ratio</b>	<b>=</b>	<u>Debtors + Bills receivable</u> Credit sales	<b>X</b> 365 / 360 days
		<b>= <u>3,50,000 + 50,000</u></b> 9,00,000 (60% of 15,00,000)	<b>X</b> 360 days
		<b>= 0.444</b>	<b>X</b> 360 days
		<b>= 160 days</b>	

7. Creditors Ratio	=	$\frac{\text{Creditors + Bills payable}}{\text{Credit Purchase}}$	X 365 / 360 days
		$= \frac{1,00,000 + 45,000}{7,50,000}$	X 360 days
		Notes: If credit purchase could not find out at that point Cost of Goods sold consider Credit purchase	
		= 0.193	X 360 days
		= 69 days	

8. Proprietary Ratio	=	$\frac{\text{Shareholders' Funds}}{\text{Total Assets}}$	
		SHF = Eq. Sh. Cap. + Reserves & Surplus + Preference Sh. Cap. – Fictitious Assets	
		Total Assets = Total Assets – Fictitious Assets	
		SHF = 20,00,000 + 20,00,000 + 11,00,000 – 1,00,000	
		= 50,00,000	
		TA = 64,00,000 – 1,00,000	
		= 63,00,000	
		= $\frac{50,00,000}{63,00,000}$	
		= 0.79 : 1	

Notes:

Rate of Return on Capital Employed		Rate of Return on Share holders Fund		Rate of return on Equity Shareholders Fund	
= $\frac{\text{EBIT}}{\text{Capital employed}}$	X 100	= $\frac{\text{PAT}}{\text{SHF}}$	X 100	= $\frac{\text{PAT} - \text{Pref. Div.}}{\text{ESHF}}$	X 100
CE = Eq Sh. Cap. + Pref. Sh.		SHF = Eq. Sh. Cap. + Pref. Sh.		ESHF = Eq. Sh. Cap. +	



Cap. + Reserves & Surplus + Debenture + Long Term Loan – Fictitious Assets	Cap. + Reserves & Surplus – Fictitious Assets	Reserves & Surplus – Fictitious Assets
Sales		15,00,000
Less: Cost of goods sold		7,50,000
<b>Gross profit</b>		<b>7,50,000</b>
Less: Operating expenses (including Depreciation)		1,50,000
Earnings before Interest & Tax (EBIT)		<b>6,00,000</b>
Less: Interest Cost		1,00,000
Earnings before Tax (EBT)		<b>5,00,000</b>
Less: Tax liability		2,50,000
Earnings after Tax (EAT/ PAT)		<b>2,50,000</b>
Less: Preference share dividend		2,00,000
Distributional Profit		<b>50,000</b>

9.		10.		11.	
Rate of Return on Capital Employed		Rate of Return on Share holders Fund		Rate of return on Equity Shareholders Fund	
= $\frac{\text{EBIT}}{\text{Capital employed}}$	X 100	= $\frac{\text{PAT}}{\text{SHF}}$	X 100	= $\frac{\text{PAT} - \text{Pref. Div.}}{\text{ESHF}}$	X 100
<b>CE</b> = Eq Sh. Cap. + Pref. Sh. Cap. + Reserves & Surplus + Debenture + Long Term Loan – Fictitious Assets		<b>SHF</b> = Eq. Sh. Cap. + Pref. Sh. Cap. + Reserves & Surplus – Fictitious Assets		<b>ESHF</b> = Eq. Sh. Cap. + Reserves & Surplus – Fictitious Assets	
<b>CE</b> = 20,00,000 + 20,00,000 11,00,000 + 10,00,000 – 1,00,000		<b>SHF</b> = 20,00,000 + 20,00,000 11,00,000 – 1,00,000		ESHF = 20,00,000 + 11,00,000 – 1,00,000	

<b>= 60,00,000</b>		<b>= 50,00,000</b>		<b>= 30,00,000</b>	
= $\frac{6,00,000}{60,00,000}$	X 100	= $\frac{2,50,000}{50,00,000}$	X 100	= $\frac{50,000}{30,00,000}$	X 100
<b>= 10%</b>		<b>= 5%</b>		<b>= 1.67 %</b>	

#### Problem = 4

From the following particulars extracted from the books of Ashok & Co. Ltd., compute the following ratios and comment:

(a) Current ratio, (b) Acid Test Ratio, (c) Stock-Turnover Ratio, (d) Debtors Turnover Ratio, (e) Creditors' Turnover Ratio, and Average Debt Collection period.

	1-1-2002	31-12-2002
	Rs.	Rs.
Bills Receivable	30,000	60,000
Bills Payable	60,000	30,000
Sundry Debtors	1,20,000	1,50,000
Sundry Creditors	75,000	1,05,000
Stock-in-trade	96,000	1,44,000

#### Additional information:

- (a) On 31-12-2002, there were assets: Building Rs. 2,00,000, Cash Rs. 1,20,000 and Cash at Bank Rs. 96,000.  
 (b) Cash purchases Rs. 1,38,000 and Purchases Returns were Rs. 18,000.  
 (c) Cash sales Rs. 1,50,000 and Sales returns were Rs. 6,000.  
 Rate of gross profit 25% on sales and actual gross profit was Rs. 1,50,000.

#### Solution – 4 (Problem related to find out missing item)

**Notes:** In this problem available information is not enough to solve ratios asked so that need to prepare Trading Account to identify values which are not given in the question.

#### Trading Account

Particular	Amount Rs.	Particular	Amount Rs.
To Opening Stock	96,000	By Sales: Cash: 1,50,000	
To Purchase: Cash: 1,38,000		Credit : <u>4,56,000</u>	
Credit: <u>3,78,000</u>		6,06,000	
5,16,000		Less: S/R <u>6,000</u>	<b>6,00,000</b>

Less: P/R	<u>18,000</u>	4,98,000	By Closing Stock	1,44,000
To Gross Profit		1,50,000		
		7,44,000		7,44,000

1. Gross Profit Margin =	<u>Gross profit</u> Sales	X 100
	25% = <u>1,50,000</u> Sales	X 100
	Sales = <u>1,50,000</u> 25	X 100
	Sales = <b>6,00,000</b>	

2. Current Ratio =	<u>Current Assets</u> Current liabilities	
	Current Assets = Stock + debtors + Bills receivable + Cash + Bank Balance	
	Current Liabilities = Creditors + Bills payable	
	CA = 1,44,000 + 1,50,000 + 60,000 + 1,20,000 + 96,000 = 5,70,000	
	CL = 1,05,000 + 30,000 = 1,35,000	
	= <u>5,70,000</u> 1,35,000	
	= <b>4.22 : 1</b>	

3. Acid Test Ratio =	<u>Cash &amp; Cash Equivalent Assets</u> Liquid Liabilities	
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Cash & Cash equivalent Assets = Cash + Bank + Short term Investments	
(Liquid) Quick Liabilities = Current Liabilities – BOD	
= 1,20,000 + 96,000	
= 2,16,000	
QL = 1,05,000 + 30,000	
= 1,35,000	
= <u>2,16,000</u>	
1,35,000	
= 1.6 : 1	

4. Stock Turnover Ratio =	<u>Cost of goods sold</u>
	Avg. Stock
	Avg. stock = <u>Opening Stock + Closing Stock</u>
	2
	COGS = Sales – GP
	<u>96,000 + 1,44,000</u>
	2
	AS = 1,20,000
	COGS = 6,00,000 – 1,50,000
	4,50,000
	= <u>4,50,000</u>
	1,20,000
	= 3.75 times

5. Debtors Ratio (Avg. debt collection period)	=	<u>Debtors + Bills receivable</u>	X 365 / 360 days
		Credit sales	
		= <u>1,50,000 + 60,000</u>	X 365 days
		4,56,000	

= 0.461	X 365 days
= 168 days	

<b>6. Creditors Ratio</b>	=	<u>Creditors + Bills payable</u> Credit Purchase	X 365 / 360 days
		= <u>1,05,000 + 30,000</u> 3,78,000	X 365 days
		= 0.357	X 365 days
		= 130 days	

### Problem - 5

Following is the summarised Balance Sheet of Mona Ltd. as on 31-3-04.

Particular	Rs.	Particular	Rs.
Equity Shares of Rs. 10 each 10%	10,00,000	Fixed Assets	20,00,000
Pref. Sh. of Rs.100 each Reserves and Surplus	4,00,000	Investments	2,00,000
15% Debentures	7,00,000	Closing Stock	2,00,000
Sundry Creditors	5,00,000	Sundry Debtors	4,60,000
Bank Overdraft	2,40,000	Bills Receivable	60,000
	1,60,000	Cash at Bank	60,000
		Preliminary Expenses	20,000
	30,00,000		30,00,000

Summarised Profit and Loss Account is as under for the year ending on 31-3-'04:

	Rs.
Sales (25% Cash sales)	80,00,000
Less: Cost of goods sold	56,00,000
<b>Gross Profit</b>	24,00,000
Net profit (Before interest and tax 50%)	9,00,000

Calculate the following ratios:

- (1) Rate on Return on Capital Employed (2) Proprietary Ratio (3) Debt-Equity (4) Capital gearing Ratio (5) Debtors Ratio (365 days of the year.) (6) Rate of Return on Shareholders' Funds (7) Rate of Return on Equity shareholders fund

**Solution - 5**
**Statement of Profitability**

Sales	80,00,000
Less: Cost of goods sold	56,00,000
<b>Gross profit</b>	<b>24,00,000</b>
Less: Operating expenses (including Depreciation)	15,00,000
Earnings before Interest & Tax (EBIT)	<b>9,00,000</b>
Less: Interest Cost	75,000
Earnings before Tax (EBT)	<b>8,25,000</b>
Less: Tax liability (50%)	4,12,500
Earnings after Tax (EAT/ PAT)	4,12,500
Less: Preference share dividend	40,000
Distributional Profit	<b>3,72,500</b>

1.		6.		7.	
Rate of Return on Capital Employed		Rate of Return on Share holders Fund		Rate of return on Equity Shareholders Fund	
= $\frac{\text{EBIT}}{\text{Capital employed}}$	X 100	= $\frac{\text{PAT}}{\text{SHF}}$	X 100	= $\frac{\text{PAT} - \text{Pref. Div.}}{\text{ESHF}}$	X 100
CE = Eq Sh. Cap. + Pref. Sh. Cap. + Reserves & Surplus + Debenture + Long Term Loan – Fictitious Assets		SHF = Eq. Sh. Cap. + Pref. Sh. Cap. + Reserves & Surplus – Fictitious Assets		ESHF = Eq. Sh. Cap. + Reserves & Surplus – Fictitious Assets	
CE = 10,00,000 + 4,00,000 + 7,00,000 + 5,00,000 – 20,000 = <b>25,80,000</b>		SHF = 10,00,000 + 4,00,000 + 7,00,000 – 20,000 = <b>20,80,000</b>		ESHF = 10,00,000 + 7,00,000 – 20,000 = <b>16,80,000</b>	
= $\frac{9,00,000}{25,80,000}$	X 100	= $\frac{4,12,500}{20,80,000}$	X 100	= $\frac{3,72,500}{16,80,000}$	X 100
<b>= 34.88%</b>		<b>= 19.83%</b>		<b>= 22.17 %</b>	

2. Proprietary Ratio =	<u>Shareholders' Funds</u> Total Assets	
	SHF = Eq. Sh. Cap. + Reserves & Surplus + Preference Sh. Cap. – Fictitious Assets	
	Total Assets = Total Assets – Fictitious Assets	
	SHF = 10,00,000 + 7,00,000 + 4,00,000 - 20,000 = 20,80,000	
	TA = 30,00,000 – 20,000 = 29,80,000	
	= <u>20,80,000</u> 29,80,000	
	= <b>0.70 : 1</b>	

3. Debt – Equity Ratio =	<u>Long Term Debt (Liabilities)</u> Shareholders Fund	
	LTL = Debentures + long term loans	
	SHF = Eq. Sh. Cap. + Reserves & Surplus + Preference Sh. Cap. – Fictitious Assets	
	LTL = 5,00,000	
	SHF = 10,00,000 + 7,00,000 + 4,00,000 - 20,000 = 20,80,000	
	= <u>5,00,000</u> 20,80,000	
	= <b>0.24 : 1</b>	

4. Capital Gearing Ratio =	<u>Fixed Interest or Dividend Securities</u> Equity Shareholders Fund	
	FIS = Debentures + Preference share capital	

ESHF = Eq. Sh. Cap. + Reserves & Surplus – Fictitious Assets	
LTL = 9,00,000	
ESHF = 10,00,000 + 7,00,000 - 20,000	
= 16,80,000	
= <u>9,00,000</u>	
16,80,000	
= 0.54 : 1	

5. Debtors Ratio (Avg. debt collection period)	=	<u>Debtors + Bills receivable</u> Credit sales	X 365 / 360 days
		= <u>4,60,000 + 60,000</u> 60,00,000	X 365 days
		= 0.461	X 365 days
		= 31.63 days = 32 days (Aprox.)	

### Problem - 6

Two years' Balance sheets of Jamuna Company Ltd. are as follows:[S. U. T.Y.-April, 1999]

Liabilities	31-3-03	31-3-04	Assets	31-3-03	31-3-04
Equity share capital	1,00,000	1,50,000	Land and Buildings	1,00,000	90,000
10%Pref. Sh. capital	50,000	50,000	Machinery	90,000	90,000
General Reserve Profit &	30,000	30,000	Debtors	53,000	30,000
Loss A/c 12%	20,000	-----	Bills Receivable	20,000	12,000
Debentures Creditors	1,00,000	50,000	Stock	75,000	90,000
Bills payable	30,000	35,000	Bank Balance	15,000	35,000
Bank Overdraft	10,000	25,000	Cash Balance	2,000	13,000
O/s. Expenses	10,000	20,000	Profit & Loss A/c	----	10,000
	<u>5,000</u>	<u>10,000</u>			
	3,55,000	3,70,000		3,55,000	3,70,000



**Additional Information:**

	2002-'03	2003-04
	Rs.	Rs.
(1) Sales	3,65,000	2,19,000
(2) Cost of Goods sold	2,19,000	1,46,000
(3) Net profit (Before Pref. Dividend)	35,000	47,500
(4) Stock on 1-4-'02	71,000	---

Calculate following ratios and give your opinion about company position in 2003-'04 in comparison with 2002-'03. Whether it is positive or negative?

- (1) Current ratio (2) Liquid ratio (3) Debtors ratio (Take 365 days for calculations) (4) Gross profit ratio (5) Stock Turnover ratio (6) Rate of return on equity share-holders' funds.

**Solution - 6 (problem related to comparative analysis between two years)**

1. Current Ratio	=	<u>Current Assets</u>	
		Current liabilities	
		Current Assets = Stock + debtors + Bills receivable + Cash + Bank Balance	
		Current Liabilities = Creditors + Bills payable	
		<b>2002-03:</b>	
		= <u>53,000 + 20,000 + 75,000 + 15,000 + 2,000</u>	
		30,000 + 10,000 + 10,000 + 5,000	
		= <u>1,65,000</u>	
		55,000	
		= <b>3 : 1</b>	
		<b>2003-04:</b>	
		= <u>30,000 + 12,000 + 90,000 + 35,000 + 13,000</u>	
		35,000 + 25,000 + 20,000 + 10,000	
		= <u>1,80,000</u>	
		90,000	
		= <b>2 : 1</b>	

2. Liquid Ratio	=	<u>Liquid Assets</u>	
		Liquid liabilities	

(Liquid) Quick Assets = Current Assets - Stock	
(Liquid) Quick Liabilities = Current Liabilities – BOD	
<b>2002-03:</b>	
= $\frac{1,65,000 - 75,000}{55,000 - 10,000}$	
= $\frac{90,000}{45,000}$	
= <b>2 :1</b>	
<b>2003-04:</b>	
= $\frac{1,80,000 - 90,000}{90,000 - 20,000}$	
= $\frac{90,000}{70,000}$	
= <b>1.29 : 1</b>	

<b>3. Debtors Ratio</b>	=	<u>Debtors + Bills receivable</u>	<b>X</b> 365 / 360 days
<b>(Avg. debt collection period)</b>		Credit sales	
	<b>2002-03:</b>		
	= $\frac{53,000 + 20,000}{3,65,000}$		<b>X</b> 365 days
	= $\frac{73,000}{3,65,000}$		<b>X</b> 365 days
	= <b>73 days</b>		
	<b>2003-04:</b>		
	= $\frac{30,000 + 12,000}{2,19,000}$		<b>X</b> 365 days
	= $\frac{42,000}{2,19,000}$		<b>X</b> 365 days
	= <b>70 days</b>		

4. Gross Profit Margin =	<u>Gross profit</u> Sales	X 100
	<b>GP = Sales - COGS</b>	
	<b>2002-03:</b> 365000 - 219000 = 1,46,000	
	<b>2003-04:</b> 219000 - 146000 = 73,000	
	<b>2002-03:</b> = <u>1,46,000</u> 3,65,000	X 100
	= 40%	
	<b>2003-04:</b> = <u>73,000</u> 2,19,000	X 100
	= 33.33%	

2. Stock Turnover Ratio =	<u>Cost of goods sold</u> Avg. Stock	
	Avg. stock = $\frac{\text{Opening Stock} + \text{Closing Stock}}{2}$	
	<b>2002-03:</b> $\frac{71000 + 75000}{2}$ = 73,000	
	<b>2003-04:</b> $\frac{75000 + 90000}{2}$ = 82,500	
	<b>2002-03:</b> = <u>2,19,000</u> 73,000	
	= 3 times	
	<b>2003-04:</b>	

$= \frac{1,46,000}{82,500}$
<b>= 1.77 times</b>

**7. Rate of return on Equity Shareholders Fund:**

<b>2002-03</b>	
$= \frac{\text{PAT} - \text{Pref. Div.}}{\text{ESHF}}$	<b>X 100</b>
<b>ESHF = Eq. Sh. Cap. + Reserves &amp; Surplus – Fictitious Assets</b>	
ESHF = 1,00,000 + 30,000 + 20,000	
<b>= 1,50,000</b>	
$= \frac{35,000 - 5,000}{1,50,000}$	<b>X 100</b>
<b>= 20 %</b>	
<b>2003-04:</b>	
<b>ESHF: 1,50,000 + 30,000 - 10,000</b>	
<b>= 1,70,000</b>	
$= \frac{47,500 - 5,000}{1,70,000}$	<b>X 100</b>
<b>= 25%</b>	

**Problem - 7**

The Balance Sheet as on 2002 and 2003 are as under:

<b>Liabilities</b>	<b>2002</b>	<b>2003</b>	<b>Assets</b>	<b>2002</b>	<b>2003</b>
Equity share capital	1,00,000	1,25,000	Land and Buildings	50,000	75,000
General Reserve Profit &	12,500	15,000	Plant Machinery	57,500	55,000
Loss A/c Creditors	10,000	7,500	Stock	10,000	12,500
Bills payable	5,000	6,250	Debtors	7,500	10,000
O/s. Expenses	3,750	7,500	Cash & Bank	5,000	7,500
Provident Fund	1,250	3,750	Bills Receivable	2,500	5,000
	7,500	5,000	Preliminary Exp.	7,500	5,000
	<b>1,40,000</b>	<b>1,70,000</b>		<b>1,40,000</b>	<b>1,70,000</b>

Profit & Loss A/c.					
Particulars	2002	2003	Particulars	2002	2003
To Op. Stock	5,000	10,000	By Sales	62,500	1,12,500
To Purchase	37,500	47,500	By Closing Stock	10,000	12,500
To Office Exp.	7,500	10,000	By Profit on Sale of Furniture	2,500	----
To Selling exp.	5,000	12,500			
To Fin. Exp.	2,500	15,000			
To Net Profit	17,500	30,000			
	75,000	1,25,000		75,000	1,25,000

Find out (1) Current Ratio (2) Stock Turnover Ratio (3) Gross Profit Ratio (4) Liquid Ratio (5) Debtor Ratio (working days 300) (6) Return on Equity Capital employed (7) Ownership Ratio.

### Solution - 7

1. Current Ratio =	<u>Current Assets</u>		
	Current liabilities		
	Current Assets = Stock + debtors + Bills receivable + Cash & Bank Balance		
	Current Liabilities = Creditors + Bills payable + O/s Exp. + PF		
	<b>2002:</b>		
	= $\frac{10,000 + 7,500 + 5,000 + 2,500}{5,000 + 3,750 + 1,250 + 7,500}$		
	= $\frac{25,000}{17,500}$		
	= 1.43 :1		
	<b>2003-04:</b>		
	= $\frac{12,500 + 10,000 + 7,500 + 5,000}{6,250 + 7,500 + 3,750 + 5,000}$		
	= $\frac{35,000}{22,500}$		
	= 1.56 : 1		

2. Stock Turnover Ratio =	<u>Cost of goods sold</u>
	Avg. Stock
	Avg. stock = $\frac{\text{Opening Stock} + \text{Closing Stock}}{2}$
	<b>2002-03:</b>
	$\frac{5000 + 10000}{2}$
	= 7,500
	<b>2003-04:</b>
	$\frac{10000 + 12500}{2}$
	= 11,250
	<b>Gross Profit</b> = Sales + Closing Stock - (Opening Stock + Purchase)
	<b>COGS</b> = Sales - GP
	<b>2002:</b> = 62,500 + 10,000 - (5,000 + 37,500)
	= 30,000
	<b>COGS</b> = 62,500 - 30,000
	= 32,500
	<b>2003:</b> = 1,12,500 + 12,500 - (10,000 + 47,500)
	= 67,500
	<b>COGS</b> = 1,12,500 - 67,500
	= 45,000
	<b>2002-03:</b>
	= $\frac{32,500}{7,500}$
	= 4.33 times
	<b>2003-04:</b>
	= $\frac{45,000}{11,250}$
	= 4 times

3. Gross Profit Margin =	<u>Gross profit</u> Sales	X 100
	<b>GP = Sales - COGS</b>	
	<b>2002-03:</b>	
	<b>2002:</b> = 62,500 + 10,000 - (5,000 + 37,500) = 30,000	
	<b>2003-04:</b> = 1,12,500 + 12,500 - (10,000 + 47,500) = 67,500	
	<b>2002-03:</b> = <u>30,000</u> 62,500	X 100
	= 48%	
	<b>2003-04:</b> = <u>67,500</u> 1,12,500	X 100
	= 60%	

4. Liquid Ratio =	<u>Liquid Assets</u> Liquid liabilities	
	(Liquid) Quick Assets = Current Assets - Stock	
	(Liquid) Quick Liabilities = Current Liabilities – BOD	
	<b>2002-03:</b> = <u>25,000 - 10,000</u> 17,500	
	= <u>15,000</u> 17,500	
	= 0.86 :1	
	<b>2003-04:</b> = <u>35,000 - 12,500</u> 22,500	

= $\frac{22,500}{22,500}$	
= 1 : 1	

<b>5. Debtors Ratio</b> (Avg. debt collection period)	=	$\frac{\text{Debtors + Bills receivable}}{\text{Credit sales}}$	X 300 days
		<b>2002-03:</b> $= \frac{7,500 + 2,500}{62,500}$	X 300 days
		$= \frac{10,000}{62,500}$	X 300 days
		= 48 days	
		<b>2003-04:</b> $= \frac{10,000 + 5,000}{1,12,500}$	X 300 days
		$= \frac{15,000}{1,12,500}$	X 300 days
		= 40 days	

**6. Rate of return on Equity Shareholders Fund:**

<b>2002</b> = $\frac{\text{PAT} - \text{Pref. Div.}}{\text{ESHF}}$	X 100
<b>ESHF = Eq. Sh. Cap. + Reserves &amp; Surplus – Fictitious Assets</b>	
ESHF = 1,00,000 + 12,500 + 10,000 - 7,500 = <b>1,15,000</b>	
= $\frac{17,500}{1,15,000}$	X 100
= <b>15.22 %</b>	
<b>2003:</b>	



<b>ESHF: 1,25,000 + 15,000 + 7,500 - 5,000</b> <b>= 1,42,500</b>	
<b>=</b> $\frac{30,000}{1,42,500}$	<b>X 100</b>
<b>= 21.05%</b>	

<b>7. Ownership Ratio =</b>	<u>Shareholders' Funds</u>	
	Total Assets	
	SHF = Eq. Sh. Cap. + Reserves & Surplus – Fictitious Assets	
	Total Assets = Total Assets – Fictitious Assets	
	<b>2002 =</b> SHF = 1,00,000 + 12,500 + 10,000 - 7,500	
	= 1,15,000	
	TA = 1,40,000 - 7,500	
	= 1,32,500	
	= $\frac{1,15,000}{1,32,500}$	
	<b>= 0.87 : 1</b>	
	<b>OR</b>	
	<b>= 87%</b>	
	<b>2003 =</b> SHF = 1,25,000 + 15,000 + 7,500 - 5,000	
	= 1,42,500	
	TA = 1,70,000 - 5,000	
	1,65,000	
	= $\frac{1,42,500}{1,65,000}$	
	<b>= 0.86 : 1</b>	
	<b>OR</b>	
	<b>= 86%</b>	

### Problem - 8

Following are incomplete Trading & Profit and Loss A/c. and Balance Sheet.

#### Trading A/c.

Particular	Rs.	Particular	Rs.
To Op. stock	3,50,000	By Sales	(?)
To Purchase	(?)	By Closing Stock	(?)
To Purchase Return	87,000		
To Gross Profit	7,18,421		
	<b>14,96,710</b>		<b>14,96,710</b>

#### Profit & Loss A/c.

Particular	Rs.	Particular	Rs.
To Office Exp.	3,70,000	By Gross Profit	7,18,421
To Int. on Deb.	30,000	By Commission	(?)
To Tax. Provision	18,421		
To Net Profit	3,50,000		
	(?)		(?)

#### Balance Sheet

Particular	Rs.	Particular	Rs.
Paid Up Capital	5,00,000	Plant & machinery	7,00,000
General Reserve	(?)	Stock	(?)
P & L a/c.	(?)	Debtors	(?)
10% Debenture	(?)	Bank	62,500
Current Liabilities	6,00,000	Other Fixed Assets	(?)
	(?)		(?)

Find out missing items with the help of other details are as under:

1. Current Ratio was 2:1.
2. Closing Stock is 25% of Sales.
3. Proposed Dividend was 40% of paid up capital.
4. Gross profit Ratio was 60%.
5. Amount transfer to General Reserve is same as proposed Dividend.
6. Balance of P & L Account is calculated 10% of proposed dividend.
7. Commission income is 1/7 of Net profit.
8. Balance of General reserve is twice the current year transfer amount.

### Solution - 8

#### Trading A/c.

Particular	Rs.	Particular	Rs.
To Op. stock	3,50,000	By Sales (?)	<b>11,97,368</b>
To Purchase (?)	<b>3,41,289</b>	By Closing Stock (?)	<b>2,99,342</b>
To Purchase Return	87,000		
To Gross Profit	7,18,421		
	<b>14,96,710</b>		<b>14,96,710</b>

**Profit & Loss A/c.**

Particular	Rs.	Particular	Rs.
To Office Exp.	3,70,000	By Gross Profit	7,18,421
To Int. on Deb.	30,000	By Commission (?)	50,000
To Tax. Provision	18,421		
To Net Profit	3,50,000		
	<b>7,68,421</b>		<b>7,68,421</b>

**Balance Sheet**

LIABILITIES	AMOUNT	ASSETS	AMOUNT
Paid Up Capital	5,00,000	Plant & machinery	7,00,000
General Reserve (?)	6,00,000	Stock (?)	2,99,342
P & L a/c. (?)	20,000	Debtors (?)	8,38,158
10% Debenture (?)	3,00,000	Bank (?)	62,500
Current Liabilities	6,00,000	Other Fixed Assets	1,20,000
	<b>20,20,000</b>		<b>20,20,000</b>

1. Gross Profit Margin =	$\frac{\text{Gross profit}}{\text{Sales}}$	X 100
	$60 = \frac{7,18,421}{\text{Sales}}$	X 100
	$\text{Sales} = \frac{7,18,421}{60}$	X 100
	<b>Sales = 11,97,368</b>	

2. Closing Stock =	<b>Sales x 25%</b>
	11,97,368 x 25%
	<b>CS = 2,99,342</b>

3. Proposed Dividend =	<b>Paid up Capital x 40%</b>
	= 5,00,000 x 40%
	<b>PD = 2,00,000</b>

4. General Reserve =	GR find out as per Proposed Dividend
	Proposed Dividend is 2,00,000
	<b>So that Proposed Dividend = General Reserve</b>
	<b>GR = 2,00,000</b>

5. Commission =	It is 1/7 part of Net Profit
	Commission = 3,50,000 x 1/7
	<b>Commission = 50,000</b>

6. Profit & Loss Account =	It is 10% of Proposed Dividend
	P & L A/c. = 2,00,000 x 10%
	<b>P &amp; L A/c. = 20,000</b>

7. Debenture =	Rate of Interest is 10%
	Interest amount is Rs. 30,000
	So that, Debenture value is = 30,000 x 10/100
	<b>= 3,00,000</b>

8. Current Ratio =	$\frac{\text{Current Assets}}{\text{Current liabilities}}$	
	$2 = \frac{\text{Stock + debtors + Bank Balance}}{\text{Current Liability}}$	
	$2 = \frac{2,99,342 + \text{debtors} + 62,500}{\phantom{000000}}$	

6,00,000	
$12,00,000 = \text{Debtors} + 3,61,842$	
$\text{Debtors} = 12,00,000 - 3,61,842$	
<b>Debtors = 8,38,158</b>	

8. Current Ratio =	<u>Current Assets</u> Current liabilities	
	$2 = \frac{\text{Stock} + \text{debtors} + \text{Bank Balance}}{\text{Current Liability}}$	
	$2 = \frac{2,99,342 + \text{debtors} + 62,500}{6,00,000}$	
	$12,00,000 = \text{Debtors} + 3,61,842$	
	$\text{Debtors} = 12,00,000 - 3,61,842$	
	<b>Debtors = 8,38,158</b>	

8. Balance of General Reserve =	It is twice of current year provision for General Reserve	
	Current year provision is Rs. 2,00,000	
	So that, Balance of G. R. = $2,00,000 \times 2$	
	Balance of GR = 4,00,000	
	Now, General Reserve = $4,00,000 + 2,00,000$	
	<b>GR = 6,00,000</b>	

### Problem -9

From the following information, prepare the Balance Sheet of ABB Ltd. Showing the details of working:

Paid up capital	Rs. 50,000
Plant and Machinery	Rs. 1,25,000
Total Sales (p.a.)	Rs. 5,00,000
Gross Profit	25%
Annual Credit Sales	80% of net sales
Current Ratio	2
Inventory Turnover	4
Fixed Assets Turnover	2
Sales Returns	20% of sales
Average collection period	73 days
Bank Credit to trade credit	2
Cash to Inventory	1 : 15
Total debt to current Liabilities	3

### Solution - 9

1. Net Sales	=	Total Sales - Sales Return
		= 5,00,000 - 1,00,000
		<b>= Rs. 4,00,000</b>
2. Credit Sales	=	80% of Net Sales
		= 4,00,000 x 80%
		<b>= Rs. 3,20,000</b>
3. Gross Profit	=	25% of Net sales
		= 4,00,000 x 25%
		<b>= Rs. 1,00,000</b>
4. Cost of Goods Sold	=	Net Sales - Gross Profit
		= 4,00,000 - 1,00,000
		<b>= Rs. 3,00,000</b>
5. Inventory	=	<u>Cost of Goods Sold</u> Inventory Turnover
		= <u>3,00,000</u> 4
		<b>= Rs. 75,000</b>
6. Receivable Turnover	=	<u>365</u> 73 = 5

Receivables =	<u>Credit Sales</u> Receivables Turnover
	= $\frac{3,20,000}{5}$
	= <b>Rs. 64,000</b>
7. Cash =	1/5 of Inventory
	= $\frac{1}{5} \times 75,000$
	= <b>Rs. 5,000</b>
8. Total Current Assets =	Inventory + Receivables + Cash
	= 75,000 + 64,000 + 5,000
	= <b>Rs. 1,44,000</b>
9. Total Current Liabilities =	<u>Current Assets</u>
	2
	= $\frac{1,44,000}{2}$
	= <b>Rs. 72,000</b>
10. Bank Credit =	$\frac{2}{3} \times$ Current Liabilities
	= $\frac{2}{3} \times 72,000$
	= <b>Rs. 48,000</b>
11. Trade Credit =	$\frac{1}{2}$ of Bank Credit OR $\frac{1}{3}$ of Current Liabilities
	<b>Rs. 24,000</b>
12. Total Debt =	Current Liabilities x 3
	72,000 x 3
	= <b>Rs. 2,16,000</b>
13. Long term debt =	Total Debt - Current Liabilities
	= 2,16,000 - 72,000
	= <b>Rs. 1,44,000</b>
14. Fixed Assets =	$\frac{1}{2}$ of Net Sales =
	$\frac{1}{2} \times 4,00,000$
	= <b>Rs. 2,00,000</b>
15. Other fixed Assets =	Fixed Assets - Plant & Machinery
	= 2,00,000 - 1,25,000
	= <b>Rs. 75,000</b>
16. Total Assets =	Fixed Assets + Current Assets

		= 2,00,000 + 1,44,000
		= <b>3,44,000</b>
17. Net worth	=	Total Assets - Total Debt
		3,44,000 - 2,16,000
		= <b>Rs. 1,28,000</b>
18. Reserves & Surplus	=	Net worth - Paid Up capital
		= 1,28,000 - 50,000
		= <b>Rs. 78,000</b>

**Balance Sheet**

LIABILITIES	AMOUNT	ASSETS	AMOUNT
Paid Up Capital	50,000	Plant & machinery	1,25,000
Reserves & Surplus	78,000	Other Fixed Assets	75,000
Long term Debt	1,44,000	Inventory	75,000
Bank credit	48,000	Receivables	64,000
Trade credit	24,000	Cash	5,000
	<b>3,44,000</b>		<b>3,44,000</b>



		= 2,00,000 + 1,44,000
		= <b>3,44,000</b>
17. Net worth	=	Total Assets - Total Debt
		3,44,000 - 2,16,000
		= <b>Rs. 1,28,000</b>
18. Reserves & Surplus	=	Net worth - Paid Up capital
		= 1,28,000 - 50,000
		= <b>Rs. 78,000</b>

**Balance Sheet**

LIABILITIES	AMOUNT	ASSETS	AMOUNT
Paid Up Capital	50,000	Plant & machinery	1,25,000
Reserves & Surplus	78,000	Other Fixed Assets	75,000
Long term Debt	1,44,000	Inventory	75,000
Bank credit	48,000	Receivables	64,000
Trade credit	24,000	Cash	5,000
	<b>3,44,000</b>		<b>3,44,000</b>

		= 2,00,000 + 1,44,000
		= <b>3,44,000</b>
17. Net worth	=	Total Assets - Total Debt
		3,44,000 - 2,16,000
		= <b>Rs. 1,28,000</b>
18. Reserves & Surplus	=	Net worth - Paid Up capital
		= 1,28,000 - 50,000
		= <b>Rs. 78,000</b>

**Balance Sheet**

LIABILITIES	AMOUNT	ASSETS	AMOUNT
Paid Up Capital	50,000	Plant & machinery	1,25,000
Reserves & Surplus	78,000	Other Fixed Assets	75,000
Long term Debt	1,44,000	Inventory	75,000
Bank credit	48,000	Receivables	64,000
Trade credit	24,000	Cash	5,000
	<b>3,44,000</b>		<b>3,44,000</b>