UNIT V

10) Explain the Importance of Ratio analysis as a technique for analysing financial statements.

Ratio Analysis is the process of determining and interpreting numerical relationships based on financial statements. By computing ratios, it is easy to understand the financial position of the firm, liquidity and operating efficiency of a firm.

The Importance of Ratio analysis is —

(1) Helps in analysing the financial statements: Interpreting the financial statements helps the Internal and external stakeholders of the firm. Every stakeholder has different interest like shareholders of a firm are very much interested in dividend payment, creditors would like to know that they get their repayments on due date etc.

(2) Helps in understanding the profitability of the company: Ratio Analysis throw light on how well the firm is organising its activities in a profitable manner. The owner expects a reasonable rate of return on their investment. The firm is generating enough profits or not to meet the expectations of owners.

(3) Determines the liquidity of the firm: Liquidity determines whether the company can meet its short term obligations or not. The liquidity position is sound if the company has the ability to pay

its short term debts when these are due for payments.

(4) Helps in identifying the business risk of the firm: Ratio analysis helps in understanding the business risk of the firm. Calculating the leverage ratios helps the firm to understand the business risk like whether the firm able to pay interest periodically without fail, repayment of principal as and when due.

(5) Helps in planning and future forecasting of the firm: The ratios are of utmost use in financial planning. forecasting work helps as a future guide. the ratios are used for drawing conclusions.

(6) Helpful in Cost Control: Ratios are useful in measuring the performance and the cost control by use of different ratios.

(7) To compare the performance of the firms: the main use of ratio analysis is that the strength and weakness of each firm can be compared. It facilitates the management to know whether the firm's financial position is improving & deteriorating by setting a trend with the help of ratios.

2) LIMITATIONS OF RATIO ANALYSIS

Ratio Analysis, despite of its wide applications, is not free from limitations.

(1) Accounting ratios are retrospective: the ratios are compiled based on the past data or previous performance. They may not necessarily hold good in the future and may not be helpful in making projections in future.

(2) Ratios can be manipulated: During festival seasons, there will be good turnover of stocks. If this turnover ratios is considered for decision making, the results get distorted.

(3) Concepts of ratios are not same: Based on the needs of the firm, the ratios are built on. Then the formulas may be different. Interfirm comparisons cannot be realistic in such case.

(4) Accounting methods, policies and procedures are not common: Where accounting data is generated by following different accounting methods (ex: different depreciation methods, methods of valuing closing stock like FIFO, LIFO etc) the ratios are not strictly comparable.

(5) Inflationary tendencies cannot be highlighted: In times of inflation, the accounting data of several years cannot be compared.

(6) Qualitative factors cannot be considered: factors such as character or managerial abilities cannot be considered here. It is because ratio analysis is purely quantitative analytical tool.

(7) Factors weakening ratio analysis: Sudden changes in economy such as economic crisis, lack of uniform data, identifying the right type of ratio analysis for interpretation are some of the factors threatens ratio analysis.

(3) Following is the profit and loss Account of the year ended 31st December, 2017

Debit	Amount	credit	Amount
To opening stock	1,00,000	By Sales	5,60,000
To purchases	3,50,000	By Closing stock	1,00,000
To Wages	9,000		
To Gross profit c/d	2,01,000		
	6,60,000		6,60,000
To Administrative expenses	20,000	By Gross profit b/d	2,01,000
		By Interest on Investments	10,000
To Selling and distribution exp's	89,000	By profit on Sale of Investments	8,000
To Non operating expenses	30,000		
To Net profit	80,000		
	2,19,000		2,19,000

You are required to calculate —

(1) Gross profit Ratio
(2) Net Profit Ratio
(3) Operating Ratio
(4) Operating Profit Ratio.

① Gross profit Ratio = $\frac{\text{Gross profit}}{\text{Sales}} \times 100$

$= \frac{2,01,000}{5,60,000} \times 100 \Rightarrow$

② Net profit Ratio = $\frac{\text{Net profit}}{\text{Sales}} \times 100$

$= \frac{80,000}{5,60,000} \times 100 \Rightarrow$

③ Calculation of operating expenses

Cost of goods sold (Sales − Gross profit − 3,59,000
[5,60,000 − 2,01,000]

add Administrative expenses - 20,000

Selling and distribution exp's 89,000

~~Non Operating expenses~~ ~~30,000~~ ~~1,39,000~~

~~468000~~

Operating Ratio = $\frac{\text{Operating expenses}}{\text{Net Sales}} \times 100$

$\Rightarrow \frac{468,000}{5,60,000} \times 100$

$\Rightarrow 83.57\%$

④ Operating profit ratio = 1 − Operating ratio

= 1 − .8357

= .1643 or 16.43%

Ex) A Business has Current assets of 30,00,000 Including Stock of goods of Rs 5,00,000. Its Current liabilities are 15,00,000. What is the Current Ratio? If rest of the Current assets Consists of Sundry debtors and Cash. What is the Quick Ratio? However if the business should have Maintained stock of 15,00,000, what would be its Current Ratio? What would be the Quick Ratio?

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

$$\Rightarrow \frac{30,00,000}{15,00,000} = 2:1$$

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

$$\Rightarrow \frac{30,00,000 - 5,00,000}{15,00,000} = \frac{25,00,000}{15,00,000} = 1.67:1$$

If stock is 15,00,000 what will be New Current Ratio and Quick Ratio.

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

$$\Rightarrow \frac{30,00,000 + 10,00,000}{15,00,000} = 2.67:1$$

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current liabilities}} = \frac{40,00,000 - 15,00,000}{15,00,000} = 1.67:1$$

5(a) From the following Balance sheet of Mr praveen, prepare a Schedule of changes in Working Capital and a funds flow Statement.

Liabilities	2016	2017	Assets	2016	2017
Capital	65,000	1,00,000	Cash	15,000	20,000
Borrowings	50,000	60,000	Debtors	30,000	28,000
Trade Creditors	42,000	39,000	Stock	55,000	72,000
Bank overdraft	35,000	25000	Land & Buildings	80,000	1,00,000
Outstanding expenses	5,000	6,000	Furniture	15,000	10,000
	1,95,000	2,30,000		1,95,000	2,30,000

Schedule of changes in Working Capital

Particulars	2016	2017	Increase	decrease
Current Assets				
Cash	15,000	20,000	5000	
Debtors	30,000	28,000		2000
Stock	55,000	72,000	17,000	
Total of Current Assets (A)	1,00,000	1,20,000		
Current Liabilities				
Creditors	42,000	39,000	3000	
Bank overdraft	35,000	25,000	10,000	
Outstanding expenses	5,000	6,000		1000
Total of Current Liability (B)	82,000	70,000		
Working Capital = [A-B]	18,000	50,000		
Increase in Working Capital	32,000			
	50,000	50,000		

Funds Flow statement

Statement of application and Source of funds

Sources	Amount	Applications	Amount
Issue of shares	37,000	Purchase of Land and Buildings	20,000
Borrowings	10,000		
Sale of Furniture	5,000	Increase in Working Capital.	32,000
	52,000		52,000

6a Differentiate between a Cash flow statement and funds flow statement.

Meaning	Funds ~~Cash~~ Flow statement	Cash ~~Funds~~ Flow statement
(1) Meaning	It is a statement of Changes in financial position of business due to Inflow and outflow of funds.	It is a statement of Changes in financial position of business due to Inflow and outflow of Cash.
(2) Basis of Concept	It is based on a wider concept of funds (i.e) Working Capital.	It is based on a narrow concept of funds i.e cash.
(3) utility	It proves useful for Medium ~~term~~ and long term ~~loans~~ financial Planning	It is specially useful for short term analysis of Cash position and planning.
(4) Concerned with	A Funds Flow statement with Changes in Working Capital position.	A cash flow statement is concerned with Changes in Cash position.

Meaning	Funds Flow	Cash Flow
(5) purpose	It analyses for the pipose of changes in ~~working~~ financial position between two balance sheets.	It analyse the reason for change in balance of cash in hand & Bank.
(6) Opening and closing Balances	Funds Flow does not contains opening balance of cash & cash equivalent	contains opening and closing balance of cash and cash equivalents.

UNIT V

1) Working capital and its Components

Working capital means the amount of Current Assets that a business firm has to Maintain for its day to day operation. It also represents the Excess of Current Assets over Current liabilities. The concepts of Working capital are of two types ① Gross Working capital : It Includes total of Current assets

② Net Working Capital : Excess of Current Assets over Current Liabilities

COMPONENTS OF WORKING CAPITAL

① Cash in hand and bank balances

② Bills Receivables

③ Sundry debtors (less provision for bad debts)

④ Short term loans & advances.

② Eps : Earning per share is the relationship between net profits and the number of shares outstanding at the end of given period. Higher Eps reflects greater profitability and more demand for the shares of that Company.

$$Eps = \frac{\text{Net profit} - \text{Interest} - \text{taxes} - \text{dividend}}{\text{No. of equity shares.}}$$

(3) **Current Ratio**: It is the ratio between current assets and current liabilities. The firm is said to be comfortable in its liquidity position if the current ratio is 2:1. It is considered as yardstick to assess short term liquidity. If current ratio is less than 2, it indicates that the business does not enjoy adequate liquidity. However, high current ratio means more than 2, it means the firm is having idle funds and not invested them properly. The formulae for calculating current ratio is—

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets include stock, debtors, Bills receivable, Cash, Bank, prepaid expenses, & soon.

Current liabilities include creditors, Bank overdraft, Bills payable, out standing expenses.

(4) **Liquidity**: Liquidity express the ability of the firm to meet its short term commitments as and when they become due. Creditors are interested to know whether the firm will be in a position to meet its commitments on time or not. If the firm is not in a position to meet its its short term commitments such as taxes wages, salaries etc. it cannot continue business for long, inspite of its strong capital base.

(5) Solvency Ratios

Solvency Ratios measure the ability of a company to pay its long term liabilities, such as debt and the interest on that debt. Solvency ratios are key component of financial analysis which helps in determining whether the company has sufficient cash flow to manage the debt obligations that are due.

It is also known as leverage ratios. A company whose solvency ratio is low, it is at more risk of not fulfilling its debt obligation and likely to be in default in paying debt. The prospective lenders of the business sees the solvency state of business (i.e) the yardstick to ~~be~~ 0.5, which is always considered to be a good number. The following are the most commonly used Ratios in Solvency Ratios.

① Debt equity ratio: It is the ratio between outsiders funds and Insiders fund. The yardstick for this ratio is 1:1.

$$\text{Debt Equity Ratio} = \frac{\text{Debt}}{\text{Equity}}$$

② Interest Coverage ratio: It is calculated to judge the firm's capacity to pay the interest, on debt it borrows. The higher the ratio, the better it is.

$$\text{Interest Coverage Ratio} = \frac{\text{Net profit before Interest and taxes}}{\text{Fixed Interest Charges}}$$

(5) Funds from operations :

One of the most important sources of funds is "Funds from operations". It is an internal source arising from the operations of business. Funds from operations will be calculated by making adjustments of several items to the net profit. All those items that are shown on the expenses side of the profit and loss account and that do not result in outflow of cash/funds will be added back to the net profit. Some of the items that will be added back to the netprofits are —

1) Depreciation — It is a loss there is no payment of cash.

2) Amortisation — Writing off assets such as goodwill, patents, trademarks do not result in outflow of cash.

3) loss on sale of fixed assets — Loss will be added back to net profits. If not done so, the amounts to error of double counting.

4) Transfer of Profit to general reserve or reserve fund — It is only a transfer entry does not result in outflow of funds.

The items that should be deducted from Netprofit

1) Gain on sale of Investments — Sale of fixed Account should be deducted from net Profit. Otherwise it amount to double counting.

② Income from Investments: Income from Investments separately shown in funds flow statement as a source. Hence Income from Investment will be added back to netprofit.

The format of statement of funds from operations.

Particulars	Debit	Credit
Net profit during the Current yr		xxxx
add Items not resulting in outflow of Cash/Funds		xxxx
		xxx
less Items not resulting in Inflow of Cash		xxx
Funds from Operations.		xxx