UNIT-V

Financial Analysis through ratio :-

Ratio Analysis :-

Ratio Analysis is the process of determining and interpreting numerical relationship based on financial statement by computing ratio's it is easy to understand the financial position of the firm (or) company.

→ Ratio Analysis to used to Focus on financial issues such as Liquidity, turn over ratios, profitability ratios, Leverage ratios.

Liquidity ratios :-

→ Liquidity ratio's express the ability of the firm to meet its short term commitness as an when they become due

→ They helps in identifying the danger signals of the firm in advance.

(i) current Ratio

(ii) Quick Ratio.

(i) current Ratio = $\frac{\text{current Assets}}{\text{current liabilities}}$

current Assets :- closing stock + cash in Hand + cash at Bank + Bills Receivable + prepaid expenses + Debotors

current liabilities :-

creditors + Bank overdraft + Bills payable + outstanding expenses + income Recieved in advance + all provisions + dividend payable.

(i) Quick Ratio :-

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

Quick Assets = current Assets - (closing stock + prepaid expenses)

② turn over ratio's :-

ⓐ stock/inventory turn over ratio:

Inventory turn over Ratio :

$$\text{inventory turnover ratio} = \frac{\text{cost of Goods solds}}{\text{average inventory}}$$

COGS = sales - gross profit

$$\text{Average inventory} = \frac{\text{open inventory} + \text{close inventory}}{2}$$

$$\text{inventory holding period} = \frac{365 \text{ days}}{\text{inventory turnover ratio}}$$

(b) Debtor Turnover ratio :-

$$\text{Debtor turnover ratio} : \frac{\text{credit sales}}{\text{Average debtors}}$$

$$\text{Average debtors} = \frac{\text{Opening debtors} + \text{closing debtors}}{2}$$

$$\text{Debit collection period} = \frac{365 \text{ days}}{\text{debtors turnover ratio}}$$

(c) creditors Turnover Ratio:-

$$\text{creditors turnover Ratio} = \frac{\text{credit purchases}}{\text{Average creditors}}$$

$$\text{Average creditors} = \frac{\text{Open creditors} + \text{closing creditor}}{2}$$

$$\text{Creditor payment period} = \frac{365 \text{ days}}{\text{creditor turnover ratio}}$$

3) Profitability Ratios:-

(a) $$\text{Gross profit Ratio} = \frac{\text{Gross profit}}{\text{Net sales}} \times 100$$

$$\text{Gross profit} = \text{Net sales} - \text{cost of Goods sold}$$

(b) $$\text{Net profit Ratio} = \frac{\text{Net profit after tax}}{\text{Net sales}} \times 100$$

(c) operating ratio = $\frac{\text{Operating expenses}}{\text{Net sales}} \times 100$

operating expenses = cost of goods sold + Administrative expense + selling & distribution expense

(d) Earning per share [EPS]

Earning per share = $\frac{\text{Net profit after tax}}{\text{No. of shares outstanding}}$

(e) Dividend yeild:-

Dividend yeild = $\frac{\text{Nominal of face value of the share}}{\text{cost or market price of the share}} \times$ % dividend per

(f) Price Earning Ratio = $\frac{\text{market price share}}{\text{Earning per share}}$

8) Leverage / capital structure / solvency ratio:-

(a) Debt equity ratio: $\frac{\text{debt (outsiders fund)}}{\text{Equity insiders fund share holders}}$

Debt = Debentures bounds, long term loans

Equity: preference & equity share holders,

& specific reserve, retained earnings

ⓑ Interest coverage Ration:-

$$= \frac{\text{Net profit before taxes \& interest}}{\text{fixed interest charges}}$$

c. Ratio of proprietors funds to total assets:

$$= \frac{\text{proprietors Funds}}{\text{Total Assets}} \times 100$$

(i) Ratio of fixed assets to proprietor's

$$\text{funds} = \frac{\text{fixed assets}}{\text{Proprietors funds}} \times 100$$

(ii) Ratio of current assets to proprietor's

$$\text{funds} = \frac{\text{current assets}}{\text{Proprietors funds}} \times 100$$

problems on liquidity Ratios :-

1. The following is an balance sheet of a company during the last year compute current ratio and quick ratio.

1. Land and building - 50000 - F.A

2. plant and machinery - 1,001,000 - F.A

3. furniture & features - 25,000 - F.A

problems on liquidity ratios:

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1. Land and Building - 50000 - F.A
2. plant and Machinery - 1,00,000 - F.A
3. furniture & features - 25,000 - F.A
4. closing stock - 25,000 - C.A
5. sundary debitors - 12,500 - C.A
6. wages prepaid - 2500 - C.A
7. creditors - 8000 - C.L
8. Rent oustanding - 2000 - C.L

(1) current ratio = $\frac{\text{current Assets}}{\text{current liabilities}}$

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

$= 4$

(b) Quick ratio = $\frac{\text{quick assets}}{\text{current liabilities}}$

Quick Assets = current assets - [closingst + PE]

= 40,000 - [25000 + 2500]

= 12500

= $\frac{12500}{10000}$ = 1.25

(Q) The following is an balance sheet of a company During the last year compute current ratio and Quick ratio

1. plant & manchinery - 50,000 - F.A

2. Furniture & Fitchers - 10,000 F.A

3. closing stock - 15,000 - C.A

4. Debitors - 15,000 - C.A

5. Rent outstanding - 1000 C.L

6. creditors - 5000 C.L

current Assests :- closing stock, Debitors

$$\text{current ratio} = \frac{\text{current Assets}}{\text{current liabilites}}$$

$$= \frac{15000+15000}{6000}$$

$$= \frac{30000}{6000}$$

$$= 5$$

Quick Assets = current Assets - [closing + P.E]

$= 30,000 - 15,000$

$= 15,000$

$$\text{Quick ratio} = \frac{\text{Quick Assets}}{\cancel{\text{Quick}}\ \text{liabilities}} = \frac{\cancel{15,000}}{\cancel{6000}}\ 2.5$$

Current

1. From the following data calculate

(i) Gross profit Ratio

(ii) Net profit Ratio

(iii) inventory turn over ratio.

particulars	Amount	particular	Amount.
sales	25,20000	fixed assets	14,40000
cost of goods sold	19,20,000	Net worth	15,00,000
Net profit	3,60,000	debt	19,00,000
Inventory	8,00,000	current liablities	6,00,000
current Assets	1,60000		

(i) Gross profit Ratio = $\frac{\text{Gross profit}}{\text{Net sales}} \times 100$

Gross profit = total revenue - COGS

= 25,20000 - 19,20,000

= 6,00,000

Gross profit Ratio = $\frac{6,00,000}{25,200000} \times 100$

= 24%

(ii) Net Profit Ratio = $\frac{\text{Net profit}}{\text{Net sales}} \times 100$

Net profit = sales - expenses

Net profit = 3,60,000

$= \frac{3,60,000}{25,20000} \times 100$

= 14.28%

(iii)

Inventory Turnover ratio = $\frac{\text{COGS}}{\text{Average inventory}}$ ~~x100~~

$= \frac{19\,20,000}{800000}$

= 2.4

(iv)

Particulars	Amount	particular	Amount
sales	15,00,000	fixed assets	200000
cost of goods sold	80,0000	Networth	100,000
Net profit	10,00000	debt	500000
Inventory	5,00,000	current liabilites	3,50,000
current Assets	700000		

i) Gross profit Ratio = $\frac{\text{Gross profit}}{\text{Net sales}} \times 100$

Gross profit = Sales - COGS

$= 15,00,000 - 80,0000$

$= 7,00000$

$= \frac{7\cancel{00000}}{15\cancel{00000}}$

$= 46.6\%$

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

$= \frac{1\cancel{0,00,000}}{15,\cancel{00,000}} \times 100$

$= 66.6\%$

iii) inventory Turn over ratio = $\frac{\text{COGS}}{\text{Average inventory}}$

$= \frac{8\cancel{00000}}{5\cancel{00000}}$

$= 1.6$