28

ACCOUNTING RATIOS – I

In the previous lesson, you have learnt the relationship between various items of the financial statements. You have also learnt various tools of analysis of financial statements such as comparative statements, common size statement, and trend analysis. However, like the above tools another important tool which is very useful to examine the financial statements is ratio analysis. Acounting ratios are calculated from the financial statements to arrive at meaningful conclusions pertaining to liquidity, profitability, and solvency. Acounting ratio can be of different types. In this lesson, we will learn about different types of accounting ratios and their method of calculation.

OBJECTIVES

After studying this lesson, you will be able to :

● state the meaning of accounting ratio;

● classify the accounting ratios;

● explain various types of accounting ratios on the basis of liquidity and turnover.

28.1 MEANING AND ITS CLASSIFICATION

The ratio is an arithmetical expression ie. relationship of one number to another. It may be defined as an indicated quotient of the mathematical expression. It is expressed as a proportion or a fraction or in percentage or in terms of number of times. A financial ratio is the relationship between two accounting figures expressed mathematically. Suppose there are two accounting figures of a concern are sales Rs 100000 and profits Rs 15000. The ratio between these two figures will be

$$\frac{15000}{100000} = 3 : 20 \text{ or } 15\%$$

Ratios provide clues to the financial position of a concern. These are the indicators of financial strength, soundness, position or weakness of an enterprise. One can draw conclusions about the financial position of a concern with the help of accounting ratios.

Suppose one shopkeeper (X) earns a profit of Rs 1000 and another (Y) earns Rs 20000 which one is more efficient? We may say that the one who earns a higher profit is running his shop better. In fact to answer the questions, we must ask, how much is the capital employed by each shopkeeper? Let, X employ Rs 100000 and Y Rs 400000. We can work out the percentage of profit earned by each to the capital employed. Thus,

X $\quad \dfrac{Rs\ 10000}{Rs\ 100000} \times 100 = 10\%$

Y $\quad \dfrac{Rs\ 20000}{Rs\ 400000} \times 100 = 5\%$

These figures show that for every Rs100 of capital X earns Rs 10 and Y earns Rs 5. Y is obviously making a better use of the funds employed by him. He must be treated as more efficient of the two. The above example shows that absolute figures by themselves do not communicate the meaningful information.

Broadly accounting ratios can be grouped into the following categories :

(a) Liquidity ratios   (b) Ativity ratios   (c) Solvency ratios

(c) profitability ratios   (e) Leverage ratio

Liquidity Ratios

The term liquidity refers to the ability of the company to meet its current liabilities. Liquidity ratios assess capacity of the firm to repay its short term liabilities. Thus, liquidity ratios measure the firms' ability to fulfil short term commitments out of its liquid assets. The important liquidity ratios are

  (i)   Current ratio

  (ii)   Quick ratio

(i) Current ratio

Current ratio is a ratio between current assets and current liabilities of a firm for a particular period. This ratio establishes a relationship between current assets and current liabilities. The objective of computing this ratio is to measure the ability of the firm to meet its short term liability. It compares the current assets and current liabilities of the firm. This ratio is calculated as under :

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

Current Assets are those assets which can be converted into cash within a short period ie. not exceeding one year. It includes the following :

Cash in hand, Cash at Bank, Bill receivables, Short term investment, Sundry debtors, Stock, Prepaid expenses

Current liabilities are those liabilities which are expected to be paid within a year. It includes the following :

Bill payables, Sundry creditors, Bank overdraft, Provision for tax, Outstanding expenses

Significance

It indicates the amount of current assets available for repayment of current liabilities. Higher the ratio, the greater is the short term solvency of a firm and vice a versa. However, a very high ratio or very low ratio is a matter of concern. If the ratio is very high it means the current assets are lying idle. Very low ratio means the short term solvency of the firm is not good. Thus, the ideal current ratio of a company is 2 : 1 ie. to repay current liabilities, there should be twice current assets.

Illustration 1

Calculate current ratio from the following :

	Rs.
Sundry debtors	4,00,000
Stock	160,000
Marketable securities	80,000
Cash	120,000
Prepaid expenses	40,000
Bill payables	80,000
Sundry creditors	160,000
Debentures	200,000
Outstanding Expenses	160,000

Solution.

$$\text{Current Ratio} =$$

$$\text{Current Assets} = \text{Sundry debtors} + \text{Stock} + \text{Marketable securities} + \text{Cash} + \text{Prepaid expenses}$$

$$= \text{Rs} \,(400{,}000 + 160{,}000 + 80{,}000 + 120{,}000 + 40{,}000)$$

$$= \text{Rs} \; 800{,}000$$

$$\text{Current liabilities} = \text{Bill Payables} + \text{Sundry creditors} + \text{Outstanding Expenses}$$

$$= \text{Rs} \,(80{,}000 + 160{,}000 + 160{,}000) = \text{Rs} \; 400{,}000$$

$$\text{Current ratio} =$$

(ii) Quick ratio

Quick ratio is also known as Acid test or Liquid ratio. It is another ratio to test the liability of the concern. This ratio establishes a relationship between quick assets and current liabilities. This ratio measures the ability of the firm to pay its current liabilities. The main purpose of this ratio is to measure the ability of the firm to pay its current liabilities. For the purpose of calculating this ratio, stock and prepaid expenses are not taken into account as these may not be converted into cash in a very short period. This ratio is calculated as under :

$$\frac{\text{Rs} \, 800{,}000}{\text{Rs} \, 400{,}000} = 2 : 1$$

$$\boxed{\text{Liquid ratio} = \frac{\text{Liquid or quick assets}}{\text{Current liabilities}}}$$

where, liquid assets = current assets – (stock + prepaid expenses)

Significance

Quick ratio is a measure of the instant debt paying capacity of the business enterprise. It is a measure of the extent to which liquid resources are immediately available to meet current obligations. A quick ratio of 1 : 1 is considered good/favourable for a company.

Illustration 2

Taking the same information as given in illustrated 1 calculate the quick ratio.

Notes

Solution :

Quick ratio =

Quick Assets = currents assets – (Stock + Prepaid expenses)

= Rs 800,000 – (Rs 160,000 + Rs 40,000) = Rs 600000

Current liabilities = Rs 600000

Quick Ratio =   = 1 : 1

Illustration 3

Calculate liquidity ratios from the following information :

Total current assets	Rs 90,000
Stock (included in current assets)	Rs 30,000
Prepaid expenses	Rs 3,000
Current liabilities	Rs 60,000

Solution :

A   Current ratio =

= 3 : 2 or 15 : 1

B.   Liquid ratio = $\dfrac{\text{Current Assets} - (\text{Stock} + \text{Prepaid Expenses})}{\text{Current liabilities}}$

=

Illustration 4

The balance sheet of ABCD Ltd. shows the following figures :

Share capital	Rs 152,000
Cash in hand and at Bank	Rs 30,000
Fixed Assets	Rs 113,000
Creditors	Rs 20,000
5% Debentures	Rs 24,000

Accounting Ratios - I

Bill Payables	Rs	4,000
Debtors	Rs	18,000
Stock	Rs	52,000
General reserve	Rs	8,000
Profit and Loss A⁄c	Rs	5,000

Calculate (i) current ratio and (ii) liquid ratio.

Solution :

(i) $\quad$ Current ratio $= \dfrac{\text{Current Asset}}{\text{Current Liabilities}}$

where $\quad$ Current assets = Cash in hand and at bank + Debtors + Stock

$\qquad\qquad\qquad$ = Rs 30,000 + Rs 18,000 + Rs 52,000

$\qquad\qquad\qquad$ = Rs 1,00,000

$\qquad$ Current liabilities = Creditors + Bill Payable

$\qquad\qquad\qquad$ = Rs 20,000 + Rs 4,000

$\qquad\qquad\qquad$ = 24,000 $\qquad\qquad \dfrac{\text{Rs } 1,00,000}{\text{Rs } 24,000}$

$\qquad\qquad\qquad$ = $\qquad\qquad$ = 426 : 1

(ii) $\quad$ Quick ratio $= \dfrac{\text{Quick Assets}}{\text{Current liabilites}}$

where $\quad$ Quick assets = current Assets – Stock

$\qquad\qquad\qquad$ = Rs 1,00,000 – Rs 52,000

$\qquad\qquad\qquad$ = Rs 48,000

$\qquad$ Quick ratio = $\qquad\qquad$ = 2 : 1

Illustration 5

From the following information, if Rs 1000 is paid to creditors what will be the effect (increase or decrease or no change) on current ratio, if before payment, balances are : Cash Rs 15000, Creditors Rs 7,500?
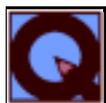
Solution :

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

Before payment = = 2 : 1

After payment = Rs 1000 to creditors

$$\text{Current Ratio} = \frac{\text{Cash}}{\text{Creditors}} = \frac{\text{Rs } 15,000 - \text{Rs } 1000}{\text{Rs } 7,500 - \text{Rs } 1000}$$

$$= \frac{\text{Rs } 14,000}{\text{Rs } 6,500} = 2.15 : 1$$

Hence, it increases the current ratio from 2 : 1 to 2.15 : 1

INTEXT QUESTIONS 28.1

I. Select the current assets from the list given below

Cash at bank	Debtors
Stock	Cash : Rs 15,000 ~~Prepaid expenses~~
Short term investment	Creditors Rs 7,500 Goodwill
Building	Cash in hand
Furniture	
Bill Receivables	

II. Fill in the blanks with suitable words or figures :

  (i)   Current ratio = $\dfrac{}{\text{Current liabilities}}$

  (ii)   The ideal current ratio is __

  (iii)   The ideal liquid ratio is __

  (iv)   Liquid assets = __   – (Stock + prepaid expenses)

28.2 ACTIVITY OR TURNOVER RATIOS

Ativity ratios measure the efficiency or effectiveness with which a firm manages its resources. These ratios are also called turnover ratios because they indicate the speed at which assets are converted or turned over in sales.

Accounting Ratios - I

These ratios are expressed as 'times' and should always be more than one. Some of the important activity ratios are :

(i) Stock turnover ratio

(ii) Debtors turnover ratio

(iii) Creditors turnover ratio

(iv) Working capital turnover ratio

(i) Stock turnover ratio

Stock turnover ratio is a ratio between cost of goods sold and the average stock or inventory.Every firm has to maintain a certain level of inventory of finished goods.But the level of inventory should neither be too high nor too low.It evaluates the efficiency with which a firm is able to manage its inventory.This ratio establishes relationship between cost of goods sold and average stock.

> Stock Turnover Ratio =

$$\text{Cost of goods sold} = \text{Opening stock} + \text{Purchases} + \text{Direct expenses} - \text{Closing Stock}$$

$$\text{Inventory conversion period} = \frac{\text{Days in a year}}{\text{Inventory turnover ratio (times)}}$$

OR Cost of goods sold = Sales – Gross Profit

$$\text{Average stock} = \frac{\text{Opening stock} + \text{Closing stock}}{2}$$

> (i) If cost of goods sold is not given, the ratio is calculated from the sales.
>
> (ii) If only closing stock is given, then that may be treated as average stock.

Inventory/stock conversion period

It may also be of interest to see average time taken for clearing the stocks. This can be possible by calculating inventory conversion period.This period is calculated by dividing the number of days by inventory turnover.

> Inventory conversion period =

Significance

The ratio signifies the number of times on an average the inventory or stock is disposed off during the period. The high ratio indicates efficiency and the low ratio indicates inefficiency of stock management.

Illustration 6

Calculate stock turnover ratio from the following information:

Opening stock	Rs	45000
Closing stock	Rs	55000
Purchases	Rs	160000

Solution :

$$\text{Stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

$$\text{Average stock} = \frac{\text{Opening stock} + \text{Closing stock}}{2}$$

$$\text{Average stock} = \frac{\text{Rs } (45000 + 55000)}{2}$$

Rs 50000

$$= \text{Rs } 50000$$

Cost of goods sold = Opening stock + Purchases – closing stock

= Rs 45000 + 160000 – 55000

= Rs 150000

Stock Turnover Ratio =   = 3 times

Illustration 7

Opening stock	Rs	19,000
Closing stock	Rs	21,000
Sales	Rs	2,00,000

Gross Profit 25% of sale. Calculate stock turnover ratio.

Accounting Ratios - I

Solution :

    Cost of good sold = Sales – Gross profit

                 = Rs 2,00,000 – 25% of Rs 2,00,000

                 = Rs (2,00,000 – 50,000)

                 = Rs 1,50,000

    Average stock =

                 =

                 = 20,000

    Stock turn over ratio =

$$= \frac{Rs\ 1,50,000}{Rs\ 20,000}$$

              = 75 times

Illustration 8

$$\frac{Cost\ of\ goods\ sold}{Average\ stock}$$

$$\frac{Rs(19,250+21,000)\ Opening\ stock\ Closing\ stock}{Average\ stock\ 2}$$

Annual sales	Rs 4,00,000
Gross profit	20% on sales
Opening stock	Rs 38,500
Closing stock	Rs 41,500

Calculate stock turnover ratio and inventory conversion period for 2006. Assume 360 days in the year.

Solution :

$$Stock\ turnover\ ratio = \frac{Cost\ of\ goods\ sold}{Average\ stock}$$

    Costs of goods sold = Sales – Gross profit

                  = Rs 4,00,000 – (20% on Rs 4,00,000)

                  = Rs 4,00,000 – Rs 80,000

                  = Rs 320,000

$$\text{Average stock} = \frac{\text{Opening stock} + \text{Closing stock}}{2}$$

$$=$$

$$= \text{Rs } 40,000$$

$$\text{Stock turnover ratio} = \frac{\text{Rs } 320000}{\text{Rs } 40000}$$

$$= 8 \text{ times}$$

Inventory conversion period =

$$= \frac{360}{8} = 45 \text{ days}$$

Illustration 9

From the following information calculate opening stock and closing stock:

Sales during the year   = Rs 2,00,000

Gross profit on sales   = 50%

Stock turnover ratio   = 4 times

If closing stock was Rs 10,000 more than the opening stock what will be the amount for the opening stock and closing stock?

Solution :

$$\text{Sales} = \text{Rs } 2,00,000 \text{ (given)}$$

$$\text{Gross profit on sales} = 50\% \text{ (given)}$$

$$\text{Gross profit} =$$

$$\text{Cost of goods sold} = \text{Sales} - \text{Gross profit}$$

$$= \text{Rs } 2,00,000 - \text{Rs } 1,00,000$$

$$= \text{Rs } 1,00,000$$

$$\text{Stock turnover Ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

$$4 = \frac{\text{Rs } 1,00,000}{\text{Average stock}}$$

∴ By cross multiplying

$$\text{Average stock} = \frac{\text{Rs } 1,00,000}{4} = \text{Rs } 25,000$$

$$\text{Average stock} =$$

Let opening stock be x

$$\text{Closing stock} = x + 10,000$$

$$\text{Average stock} = \qquad\qquad = 25,000 \text{ (given)}$$

or	$x + x + 10,000 = 50,000$
or	$2x = 50,000 - 10,000$
or	$2x = 40,000$
or	$x = 20,000$

Hence opening stock = Rs 20,000

Closing stock = Rs 20,000 + Rs 10,000

= Rs 30,000

INTEXT QUESTION 28.2

Fill in the blank with suitable word/words :

(i) Inventory turnover ratio is __divided by average inventory.

(ii) Average inventory =

(iii) Stock turnover ratio =

(iv) Stock turnover ratio = $\dfrac{30000}{10000} =$

(v) __ = $\dfrac{\text{Days in a year}}{\text{Inventory turnover ratio}}$

Notes

28.3 ACTIVITY OR TURNOVER RATIOS

Debtors Turnover ratio

This ratio establishes a relationship between net credit sales and average account receivables ie. average trade debtors and bill receivables. The objective of computing this ratio is to determine the efficiency with which the trade debtors are managed. This ratio is also known as Ratio of Net Sales to average receivables. It is calculated as under

$$\text{Debtors Turnover Ratio} = \frac{\text{Net credit annual sales}}{\text{Average debtors}}$$

In case, figure of net credit sale is not available then it is calculated as if sales are credit sales :

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

Note : If opening debtors are not available then closing debtors and bills receivable are taken as average debtors.

Debt collection period

$$\frac{\text{Net credit sales for the year Average Trade Debtors}}{\text{Number of credit sales period Number of days in a year}}$$

This period refers to an average period for which the credit sales remain unpaid and measures the quality of debtors. Quality of debtors means payment made by debtors within the permisible credit period.

It indicates the rapidity at which the money is collected from debtors. This period may be calculated as under :

$$\text{Debt collection period} =$$

or $$= \frac{12 \text{ months}/52 \text{ weeks}/365 \text{ days}}{\text{Debtors turnover ratio}}$$

Note : Average credit sales per day

$$=$$

Significance

Debtors turnover ratio is an indication of the speed with which a company collects its debts. The higher the ratio, the better it is because it indicates

that debts are being collected quickly. In general, a high ratio indicates the shorter collection period which implies prompt payment by debtor and a low ratio indicates a longer collection period which implies delayed payment for debtors.

Illustration 10

Find out (a) debtors turnover and (b) average collection period from the following information for one year ended 31st March 2006.

	31st March 2006
Annual credit sales	500000
Debtors in the beginning	80000
Debtors at the end	100000
Debt to be taken for the year	360 days

Solution

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

$$\text{Debtors turnover} = \frac{360}{556} \frac{\text{Credit annual sales}}{\text{Average debtors}} = 64.7 \text{ days}$$

$$\text{Average debtors} = \frac{80000 + 100000}{2} = \text{Rs } 90000$$

(a) Debtor turnover ratio $= \dfrac{500000}{90000} = 556$ times

(b) Average collection period

$$= \frac{\text{No of working days}}{\text{Debtors turnover}}$$

$$= \quad\quad = 65 \text{ days (approximately)}$$

Creditors Turnover Ratio

It is a ratio between net credit purchases and average account payables (ie creditors and Bill payables). In the course of business operations, a firm

has to make credit purchases. Thus a supplier of goods will be interested in finding out how much time the firm is likely to take in repaying the trade creditors. This ratio helps in finding out the exact time a firm is likely to take in repaying to its trade creditors. This ratio establishes a relationship between credit purchases and average trade creditors and bill payables and is calculated as under

$$\text{Creditors turnover ratio} = \frac{\text{Net credit purchases}}{\text{Average trade creditors and / or average bill payables}}$$

$$\text{Average creditors} = \frac{\text{Creditors in the beginning} + \text{Creditors at the end}}{2}$$

$$=$$

Significance

Creditors turnover ratio helps in judging the efficiency in getting the benefit of credit purchases offered by suppliers of goods. A high ratio indicates the shorter payment period and a low ratio indicates a longer payment period.

$$= \frac{\text{Opening creditors + Opening Bill payables +}}{\text{Closing creditors + Closing Bill payables}}{2}$$

Debt payment period

This period shows an average period for which the credit purchases remain unpaid or the average credit period actually availed of :

$$\text{Debt payment period} =$$

$$\text{or} = \frac{\text{12 months or 52 weeks or 365 days}}{\text{Creditors turnover ratio}}$$

Note : Average net credit purchases per day in the year

$$=$$

Illustration 11

Calculate creditors turnover ratio and debt payment period from the following information

Accounting Ratios - I

Cash purchases	1,00,000	Total purchases	4,07,000
Opening sundry creditors	25,000	Closing sundry creditors	50,000
Closing bill payables	25,000	Opening bill payables	20,000
Purchase returns	7,000		

Solution :

$$\text{Creditors turnover ratio} = \frac{\text{Net Credit Purchases}}{\text{Average trade creditors}}$$

$$\text{Net purchases} = \text{Total purchases} - \text{Purchase returns}$$

$$= \text{Rs } 407000 - \text{Rs } 7000 = \text{Rs } 400000$$

$$\text{Net credit purchases} = \text{Net purchases} - \text{cash purchases}$$

$$= \text{Rs } 4,00,000 - \text{Rs } 1,00,000$$

$$= \text{Rs } 3,00,000$$

$$\text{Average creditors} = \frac{\begin{array}{c}\text{Opening creditors} + \text{Opening bills payable} \\ + \text{Closing creditors} + \text{Closing Bill payable}\end{array}}{2}$$

$$= \frac{\text{Rs } 25,000 + \text{Rs } 20,000 + \text{Rs } 50,000 + \text{Rs } 25,000}{2}$$

$$= = \text{Rs } 60,000$$

$$\text{Creditors Turnover Ratio} = = 5 \text{ times}$$

$$\text{Debt payment ratio} = \frac{365}{\text{Creditors turnover ratio}}$$

$$= = 73 \text{ days}$$

Illustration 12

Calculate creditors turnover ratio and average age of payables

Credit purchases during the year	Rs 14,40,000
Closing creditors	Rs 1,44,000
Closing Bill payables	Rs 96,000

Solution :

Creditors Turnover Ratio =

$$= \frac{\text{Rs } 14,40,000}{\text{Rs } 1,44,000 + \text{Rs } 96,000}$$

$$= \frac{\text{Rs } 14,40,000}{\text{Rs } 2,40,000} = 6 \text{ times}$$

Average age of payable $= \dfrac{\text{Months in a year}}{\text{Creditors turnover ratio}} =$

$$= 2 \text{ months}$$

Note : Where opening creditors and opening bill payables are not given then closing creditors and bill payables are taken as average account payables.

Working Capital Turnover Ratio

Working capital of a concern is directly related to sales.The current assets like debtors, bill receivables, cash, stock etc, change with the increase or decrease in sales.

Working capital = Current assets – Current Liabilities

Working capital turnover ratio indicates the speed at which the working capital is utilised for business operations.It is the velocity of working capital ratio that indicates the number of times the working capital is turned over in the course of a year. This ratio measures the efficiency at which the working capital is being used by a firm.A higher ratio indicates efficient utilisation of working capital and a low ratio indicates the working capital is not properly utilised.

This ratio can be calculated as

Working Capital Turnover Ratio =

Average working capital $= \dfrac{\text{Opening working capital} + \text{Closing working capital}}{2}$

If the figure of cost of sales is not given, then the figure of sales can be used.On the other hand if opening working capital is not discussed then working capital at the year end will be used.

Accounting Ratios - I

Illustration 13

Find out working capital turnover ratio for the year 2006.

Cash	10,000
Bills receivable	5,000
Sundry debtors	25,000
Stock	20,000
Sundry creditors	30,000
Cost of sales	1,50,000

Solution :

Working capital turnover ratio =

Current assets = Rs 10,000 + 5,000 + 25,000 + 20,000

= Rs 60,000

Current liabilities = Rs 30,000

Net working capital = CA – CL = Rs 60,000 – 30,000

= Rs 30,000

So, working capital turnover ratio = $\dfrac{\text{Rs } 1,50,000}{\text{Rs } 30,000} = 5$ times
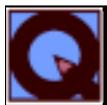
INTEXT QUESTIONS 28.3

I. Fill in the blanks with suitable word or words.

(i) Low debtors turnover ratio indicates ___ collection.

(ii) Average debt collection period = $\dfrac{12 \text{ months}}{?}$

(iii) Debtors turnover ratio =

(iv) ? = $\dfrac{\text{Credit purchases}}{\text{Average creditors}}$

Notes

(v)   Debtors turnover ratio $= \dfrac{?}{50,000} = 4$

(vi)   Debtors turnover ratio $= \dfrac{1,50,000}{?} = 3$

(vii)   Creditors turnover ratio $= \dfrac{75,000}{15000} = ?$

(viii)   Creditors turnover ratio $= \dfrac{1,00,000}{?} = 4$

II. Fill in the blank with suitable word or words :

(i)   Working capital $= \_\_\_\_\_$ – current liabilities

(ii) $\_\_\_ = \dfrac{\text{Cost of sales}}{\text{Aerage working capital}}$

(iii)   Aerage working capital =

$$\dfrac{\text{Opening working capital + Closing working capital}}{?}$$

(iv)   Working capital turnover ratio $= \dfrac{\text{Current Assets}}{\text{Current liabilities}}$

 WHAT YOU HAVE LEARNT

● The term ratio means an arithmatical relationship between two numbers.

● Liquidity ratio assesses the capacity of the firm to repay short term liability.It measures the ability to fulfil short term commitments out of liquid assets.

● The important liquidity ratios are :

(i)   Current ratio : It measures the short term solvency of a business

Current ratio =

(ii)   Liquid ratio : It measurs the ability of the firm to pay current liabilities immediately

Liquid ratio =

Liquid assets = current assets – (stock + prepaid expenses)

Accounting Ratios - I

- Activity or turnover ratios

- The important activity ratios are

  (i) Stock turnover ratio : It measures the efficiency with which the stock is managed.

  $$\text{Stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

  (ii) Debtors turnover ratio : It is calculated to indicate the efficiency of the company to collect its debts.

  $$\text{Debtors turnover ratio} = \frac{\text{Net credit sales}}{\text{Average account receivables}}$$

  (iii) Creditors turnover ratio : It indicates the efficiency with which suppliers are paid.

  $$\text{Creditors turnover ratio} = \frac{\text{Net credit purchases}}{\text{Average trade creditors}}$$

  (iv) Debt collection period indicates the average time taken by the debtors to pay.

  $$\text{Debt collection period} = \frac{\text{Number of days in a year}}{\text{Debtors turnover ratio}}$$

  (v) Debt payment period indicates the average time taken by the firm to settle the accounts payables

  Debt payment period =

TERMINAL QUESTIONS

1. Explain the significance of debtors turnover ratio and liquid ratio.

2. Explain the meaning and significance of the following ratios.

   (a) Current ratio

   (b) Creditors turnover ratio

   (c) Stock turnover ratio

3. From the following compute current ratio and quick ratio :

	Rs
Fixed Assets	100000
Stock	30000
Debtors	20,000
Cash	40,000
Prepaid expenses	10,000
Creditors	30,000
Reserves	10,000

4. Balance Sheet of Mr X and Mr. Y as on 31st December 2006 is

Liabilities	Amount Rs	Assets	Amount Rs
Equity share capital	100000	Cash in hand	20000
7% debentures	100000	Cash at Bank	20,000
Bank overdraft	40,000	Bill receivables	100000
Creditors	60000	Investment	10000
Profit and Loss A/c	20000	Debtors	50000
General reserve	30000	Stock	150000
	350000		350000

Sales during the year 2006 were Rs 490000. Calculate stock turnover ratio.

5. Given : Current ratio 2 : 5

Liquidity ratio 1 : 5

working capital Rs60000

Calculate (a) current liabilites (b) current assets (c) Liquid assets (d) stock

6. XYZ Ltd.supplies you following information regarding the year ending 31st, December 2006.

Cash	Rs 80000
Credit sales	Rs 200000
Return inward	Rs 10000
Opening stock	Rs 25000
Closing stock	Rs 30000

Gross profit ratio is 25%. Find out stock turnover ratio.

![Answers icon] **ANSWERS TO INTEXT QUESTIONS**

Intext Questions 28.1

I. Cash at Bank, stock, short term investment, Bills receivable, debtors, prepaid expenses, cash in hand

II. (i) current assets   (ii) 2 : 1
    (iii) 1 : 1   (iv) current assets

Intext Questions 28.2

(i) Cost of goods sold   (ii) Closing inventory
(iii) 2000   (iv) 3 times
(v) Inventory conversion period

Intext Questions 28.3

I.   (i) Delay in collection of debt   (ii) Debtors turnover ratio
     (iii) Net credit annual sale   (iv) creditors turnover ratio
     (v) 200000   (vi) 50000
     (vii) 5   (viii) 25000

II. (i) Current assets   (ii) Working capital turnover ratio
     (iii) 2   (iv) Average working capital

Answers to Terminal Questions

3. Current ratio 3 : 1, Quick ratio 1.67 : 1
4. 3.27 times
5. (a) 40,000   (b) 100000   (c) 6000   (d) 40000
6. 7.36 times

┌─ **Do you know?** ─────────────────────────────┐

What are HIV and AIDS?

HIV is :   **AIDS is :**
    Human   **Acquired**
    Immunodeficiency   **Immunodeficiency**
    Virus   **Syndrome**

HIV weakens the body's defence or immune system. AIDS is the late stage of HIV infection, when the immune system of the infected person has been completely destroyed, and when the person contracts a variety of diseases and infections. AIDS is thus not one particular isolated disease but a syndrome, which means that it shows a variety of symptoms related to different disorders and diseases. AIDS may develop as early as 6 months after HIV infection in a severe case, or as late as 8-10 years after infection.

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