

7.ACCOUNTING RATIOS

Q.1 The Two Basic Measures of Liquidity Ratio are-

- (a) Stock and Debtors Turnover Ratio
- (b) Current Ratio and operating ratio
- (c) Current ratio and Liquid ratio
- (d) Gross and Net profit Ratio

Ans. Current ratio and Liquid ratio

Q.2 Ideal Current Ratio is

- (a) 3:1
- (b) 2:2
- (c) 2:1
- (d) 1:1

Ans. 2:1

Q.3 Ratio=

- (a) $\frac{\text{Current Assets}}{\text{Current Liabilities}}$
- (b) $\frac{\text{Quick Assets Assets}}{\text{Current liabilities}}$
- (c) $\frac{\text{Fixed Assets}}{\text{Current liabilities}}$
- (d) None of the above

Ans. $\frac{\text{Current Assets}}{\text{Current liabilities}}$

Q.4 100- Operating Profit Ratio is equal to

- (a) Operating Ratio
- (b) Operating Net profit Ratio
- (c) Gross Profit Ratio (d) Current ratio

Ans. Operating Ratio

Q.5 Liquid Assets=

- (a) Current Assets-Inventory
- (b) Current Assets + Inventory
- (c) Current Assets- (Inventory + prepaid Expenses)
- (d) None of the above

Ans. Current Assets- (Inventory + prepaid Expenses) Q.6

Which of following is not Activity Ratio?

- (a) Inventory Turnover Ratio
- (b) Trade receivable turnover Ratio
- (c) Interest coverage Ratio
- (d) All of these

Ans. Interest coverage Ratio

Q.7 Debts to Equity ratio=

- (a) $\frac{\text{Debts}}{\text{Equity}}$
- (b) $\frac{\text{Debts}}{\text{Shareholders Fund}}$

(c) Both (a) and (b)

(d) None of these

Ans. Both (a) and (b)

Q.8 Activity Ratio Also Known As

(a) Performance Ratio

(b) Turnover Ratio

(c) Both (a) and (b)

(d) None of the above

Ans. Both (a) and (b)

Q.9 Inventory Turnover Ratio=

(a) $\frac{\text{Cost of revenue from operation}}{\text{Average Inventory}}$

(b) $\frac{\text{Cost of revenue from operation}}{\text{Opening Inventory}}$

(c) $\frac{\text{Cost of revenue from operation}}{\text{Closing Inventory}}$

(d) None of these

$\frac{\text{Cost of revenue from operation}}{\text{Average Inventory}}$

Q.10 Trade receivable Includes:

(a) Debtors

(b) Bills receivables

(c) both (a) and (b)

(d) Either (a) or (b)

Ans. both (a) and (b)

Q.11

61 Calculate Current Ratio and Liquid Ratio from the given information			
Particulars	Norte No	31 st March 2018	31 st March,2019
1.EQUITY AND LIABILITIES			
(i) Shareholder fund			
(a) Share Capital		5,25,000	5,25,000
(b) Reserve and Surplus		1,50,000	2,27,500
(ii) Non-current Liabilities		5,10,000	6,11,250
(iii) Current Liabilities		3,15,000	3,86,250
Total		15,00,000	17,50,000
II. ASSETS			
(a) Noncurrent Assets		9,00,000	10,85,000
(b) Current Assets			
Inventory		6,00,000	6,65,000
Total		15,00,000	17,50,000

Solution: For, 2017-18

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{9,00,000}{5,10,000} = \frac{1.77}{1} = 1.77:1$$

$$\text{Liquid ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}} = \frac{9,00,000 - 6,00,000}{5,10,000} = \frac{3,00,000}{5,10,000} = \frac{0.59}{1} = 0.59:1$$

For, 2018-19

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{10,85,000}{3,86,250} = \frac{2.81}{1} = 2.81:1$$

$$\text{Liquid ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}} = \frac{10,85,000 - 6,65,000}{3,86,250} = \frac{4,20,000}{3,86,250} = \frac{1.09}{1} = 1.09:1$$

Q.12 From the following information calculate the Inventory Turnover Ratio

Revenue from operations ₹6,00,000; Gross profit 25% on cost; Opening inventory was 1/3rd of closing inventory; Closing Inventory was 30% of revenue from operation.

Solution: Revenue from operation = 6,00,000

Cost of revenue from operations = Revenue from operation - Gross profit

$$\text{Gross Profit} = 3,00,000 \times \frac{25}{125} = 60,000$$

Cost of revenue from operations = 6,00,000 - 60,000 = 5,40,000

$$\text{Closing Inventory} = 9,00,000 \times \frac{30}{100} = ₹2,70,000$$

$$\text{Opening Inventory} = \frac{1}{3} \times 2,70,000 = 90,000$$

$$\text{Inventory turnover Ratio} = \frac{\text{Cost of Revenue From Operation}}{\text{Average Inventory}} = \frac{5,40,000}{1,30,000} = 4 \text{ Times}$$

Q.13 Calculate Net Profit Ratio from the following Statement of profit and Loss

Particulars	Norte No	31 st March 2019	31 st March, 2018
I. Revenue from operation		17,00,000	12,20,000
II. Other Income		8,000	14,000
III. Total Income		17,08,000	12,34,000
IV. Expenses			
(a) Cost of Material Consumed		12,40,000	10,00,000
(b) Other Expenses		2,00,000	1,20,000
Total Expenses		14,40,000	11,20,000
V. Profit Before Tax (III-IV)		2,68,000	1,14,000
VI. Less: Income Tax		1,10,000	90,000
VII. Profit After Tax (V-VI)		1,58,000	24,000

Solution:

$$\text{Net Profit Ratio} = \frac{\text{Net Profit After Tax}}{\text{Net Revenue From Operation}} \times 100 = \frac{1,58,000}{17,00,000} \times 100 = 9.29\%$$

Q.14 Following is the Balance sheet and Statement of profit and loss of a company
Statement of Profit and Loss

Particulars	₹
I. Revenue from operation (sale)	10,00,000
Add: Non-Operating Income (Profit on sale of share)	50,000
II. Total Income	10,50,000
Less: Purchase	3,00,000
Change in inventories (Opening Stock-Closing Stock) (1,50,000-2,50,000)	(1,00,000)
Wages	2,00,000
Manufacturing Expenses	1,00,000
III. Total	5,00,000
IV. Gross Profit (III -II)	5,50,000
Less: Administrative Expenses	50,000
Selling and distribution Expense	50,000
Loss on sales of plant	55,000
Interest on debentures	10,000
Total	1,65,000
Net profit	3,85,000

Balance Sheet

Particulars	₹
1. EQUITY AND LIABILITIES	
(I) Shareholder Fund	
Equity share Capital	1,00,000
Preference share capital	1,00,000
Reserves	1,00,000
(ii) Non-Current Liability:	
Debentures	2,00,000
(iii) Current Liability	
Sundry creditors	1,00,000
Bills payable	50,000
Total	6,50,000
II. Assets	
(i) Non-Current Assets	
Fixed Assets	2,50,000
(ii) Current Asset	
Stock	2,50,000
Sundry debtors	1,00,000
Cash and Cash equivalent	50,000
Total	6,50,000

Calculate Following ratios from above information

(a) Gross profit ratio

(b) Current Ratio

(c) Debt Equity ratio

(d) Stock Turnover Ratio (e) Total Assets to Debts Ratio Solution:

$$\text{Gross profit ratio} = \frac{\text{Gross Profit}}{\text{Net Revenue From Operation}} \times 100$$

$$= \frac{5,00,000}{10,00,000} \times 100 = 50\%$$

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{4,00,000}{1,50,000} = \frac{2.67}{1} = 2.67:1$$

$$\text{Debt Equity Ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{2,00,000}{3,00,000} = \frac{0.67}{1} = 0.67:1$$

$$\text{Stock Turnover ratio} = \frac{\text{Cost of Revenue from operation}}{\text{Average Inventory}}$$

$$\text{Cost of revenue from operation} = \text{Revenue from operation} - \text{Gross profit}$$

$$= 10,00,000 - 5,00,000 = 5,00,000$$

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

$$= \frac{1,50,000 + 2,50,000}{2} = \frac{4,00,000}{2} = 2,00,000$$

$$\text{Stock Turnover ratio} = \frac{5,00,000}{2,00,000} = 2.5 \text{ Times}$$

$$\text{Total Assets to Debts ratio} = \frac{\text{Total Assets}}{\text{Debts}} = \frac{6,50,000}{2,00,000} = 3.25:1$$

Q.15 Stock at beginning of the year ₹60,000

Stock at end of the year ₹1,00,000

Stock turnover Ratio ₹ 8 times

Selling Price 25% above cost

Compute Gross profit Ratio and Sales amount

$$\text{Solution: Average Stock} = \frac{\text{Opening stock} + \text{Closing Stock}}{2} = \frac{₹60,000 + ₹1,00,000}{2} = \frac{₹1,60,000}{2} = 80,000$$

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

Cost of goods Sold = Average Stock × Stock turnover ratio

$$= ₹80,000 \times 8 = ₹6,40,000 \text{ Gross}$$

Profit = 25% of ₹6,40,000 = 1,60,000

Sales = Cost of Goods Sold + Gross Profit

$$= 6,40,000 + 1,60,000 = ₹8,00,000$$

$$\text{Gross Profit Ratio} = \frac{1,60,000}{8,00,000} \times 100 = 20\%$$

Q.16 Calculate 'Debt-Equity Ratio' from the following information: Total Assets: Rs.

3,50,000; Total Debt: Rs. 2,50,000; Current Liabilities: Rs. 80,000

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

Debt = Total Debt – Current Liabilities

$$= \text{Rs. } 2,500,000 - \text{Rs. } 80,000 = \text{Rs. } 1,70,000$$

$$\text{Equity} = \text{Total Assets} - \text{Total Debts}$$

$$= \text{Rs. } 3,50,000 - \text{Rs. } 2,50,000 = \text{Rs. } 1,00,000$$

$$\text{Debt - Equity Ratio} = \frac{1,70,000}{1,00,000} = 1.7:1$$

Q.17 From the following information Calculate proprietary Ratio and Total Assets to Debt Ratio

Balance sheet of ABC Ltd.

Particulars	Note No	Figure for current Year
I EQUITY AND LIABILITIES		
(1) Shareholders Fund		
(a) Share Capital		4,50,000
(b) Reserve and Surplus		1,80,000
(2) Non-Current Liabilities		
Long term borrowings		75,000
(3) Current liabilities		
Trade payables		45,000
Total		7,50,000
II. Assets		
(1) Non-Current Assets		
(a) Fixed assets		2,25,000
(b) Non-current Investment		1,50,000
(2) Current Assets		
Inventories		3,75,000
Total		7,50,000

$$\text{Solution: Proprietary Ratio} = \frac{\text{Equity}}{\text{Total Assets}} = \frac{4,50,000 + 1,80,000}{7,50,000} = 0.84:1$$

$$\text{Total Assets to Debt Ratio} = \frac{\text{Total assets}}{\text{Debts}} = \frac{7,50,000}{75,000} = 10:1$$

Q.18 Calculate Interest Coverage Ratio from the following information.

Net Profit (after taxes) = Rs. 1,00,000

Fixed interest charges on long term borrowing = Rs. 20,000

Rate of Income Tax 50%

$$\text{Solution: Interest coverage Ratio} = \frac{\text{Profit before Interest and Tax}}{\text{Interest}}$$

$$\begin{aligned} \text{Profit before interest and tax} &= \text{Net profit after Tax} + \text{Income Tax} + \text{Interest} \\ &= 1,00,000 + 1,00,000 + 20,000 = 2,20,000 \end{aligned}$$

$$\text{Interest coverage ratio} = \frac{2,20,000}{20,000} = 11 \text{ Times}$$

Q.19 Calculate Debtors Turnover Ratio if Closing Debtors are Rs. 40,000; Opening Debtors Rs. 60,000; Cash Sales is 25% of Credit Sales and Total Sales are Rs. 2,00,000.

Solution: Debtors Turnover Ratio = $\frac{\text{Net credit Sales}}{\text{Average trade debtors}}$

Cash Sales = 25% of Credit Sales

Let the Credit Sales be Rs. X

Then Cash Sales is 25% of X

Total Sales = Cash Sales + Credit Sales = Rs. 2,00,000

$$X + 25x/100 = 2,00,000$$

$$100x + 25x = 2,00,000 \times 100$$

$$125x = 2,00,00,000$$

$$X = 2,00,00,000 / 125 = 1,60,000$$

X = Credit Sales = 1,60,000

$$\text{Cash sales} = 1,60,000 \times \frac{25}{100} = 40,000$$

$$\text{Average Debtors} = \frac{60,000 + 40,000}{2} = \frac{1,00,000}{2} = 50,000$$

$$\text{Debtors Turnover Ratio} = \frac{1,60,000}{50,000} = 3.2 \text{ Times}$$

Q.20 Calculate 'Operating Profit Ratio' and 'Operating Ratio' from the following

information: Net Revenue from Operations	₹80,000
Cost of Revenue from Operations	₹60,000
Operating Expenses	₹10,000
Indirect Expenses	₹60,000

Solution: Operating profit Ratio = $\frac{\text{Operating profit}}{\text{Net revenue from operation}} \times 100$

Operating profit = Net Revenue from Operation – Operating Cost

Operating Cost = Cost of Revenue from Operation + Operating Expenses

$$= \text{Rs. } 60,000 + 10,000 = \text{Rs. } 70,000$$

$$\text{Operating profit} = 80,000 - 70,000 = \text{Rs. } 10,000$$

$$\text{Operating profit Ratio} = \frac{10,000}{80,000} \times 100 = 12.5\%$$

$$\text{Operating Ratio} = \frac{\text{Operating Expenses}}{\text{Net revenue from operation}} \times 100 \text{ or } 100 - \text{Operating profit ratio}$$

$$= \frac{60,000 + 10,000}{80,000} \times 100 = \frac{70,000}{80,000} \times 100 = 87.5 \text{ or } 100 - 12.5 = 87.5$$