

Class-12 Accountancy
Ch-3- Accounting Ratio

QUESTIONS FOR PRACTICE

1. The relationship between two financial variables can be expressed in:
 - a. Percentage
 - b. Rate or time
 - c. Pure ratio
 - d. None of these

2. The main purpose of activities ratios is -----
 - a. To know the solvency
 - b. To know the profitability
 - c. To know how effectively the resources have been used
 - d. To meet short term liabilities

3. Revenue from operations – Cost of Revenue from operations =?
 - a. Net Profit
 - b. Net Purchases
 - c. Net Sales
 - d. Gross Profit

4. INVENTORY TURNOVER RATIO is also called as
 - a. Debtor turnover ratio
 - b. Working capital turnover ratio
 - c. Creditor's turnover ratio

- d. Stock turnover ratio
5. Shareholders' Funds + Non-current Liabilities = ?
- a. Share Capital
- b. Current Liabilities
- c. Capital Employed
- d. Total Debt
6. An Analysis of financial statements with the help of accounting ratios is termed as_____.
7. How will you calculate Capital Employed?
8. A company has a current ratio of 4:1 and Quick ratio is 2.5;1. Assuming that the inventories are Rs 22500, find out total current assets and current liabilities.
9. A firm has a Current Ratio of 4 : 1 and a Quick Ratio of 2.5 : 1. Assuming Inventories are Rs. 22,500, find out total Current Assets and Total Current Liabilities.
10. Wye Ltd. has furnished the following information regarding its Current Assets and Current Liabilities:

Current Assets:	Rs.	Current Liabilities:	Rs.
Cash and Cash Equivalents	5,000	Sundry Creditors	25,000
Debtors	29,000	Bills Payable	16,000
Bills Receivable	5,000	Outstanding Expenses	8,000
Marketable Securities	15,000	Provision for Expenses	5,000
Inventories	54,000		
	1,08,000		54,000

Calculate Current Ratio and Liquid Ratio of the company.

11. The proprietary ratio of M Ltd is 0.80 : 1. State with reasons whether the following transactions will increase, decrease or not change the proprietary ratio.

- i. Obtained a loan from bank Rs. 2,00,000 payable after five years.
- ii. Purchased machinery for cash Rs. 75,000
- iii. Redeemed 5% redeemable preference shares Rs. 1,00,000.
- iv. Issued equity shares to the vendors of machinery purchased for Rs. 4,00,000.

12. From the following information obtained from the books of Kundan Ltd, calculate inventory turnover ratio for the years 2015-16 and 2016-17.

	2015-16 (Rs.)	2016-17 (Rs.)
Inventory on 31st March	7,00,000	17,00,000
Revenue from operations	50,00,000	75,00,000

(Gross profit is 25% on cost of revenue from operations) In the year 2015-16, inventory increased by Rs.2,00,000.

13. Calculate Opening and Closing Trade Receivables from the following information if Trade Receivables Turnover Ratio is 3 Times:

- i. Cash Revenue from Operations is $\frac{1}{3}$ rd of Credit Revenue from Operations.
- ii. Cost of Revenue from Operations Rs. 2,40,000.
- iii. Gross Profit 25% on Cost of Revenue from Operations.
- iv. Trade Receivables at the end were 3 times more than that of in the beginning.

14. From the following information, calculate the following ratios:

- i. Operating Ratio
- ii. Stock Turnover Ratio
- iii. Proprietary Ratio

Information:

	Rs. 10,00,000
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Cash Sales	
Credit Sales	120% of cash sales
Operating Expenses	10 % of total sales
The rate of Gross Profit	40%
Operating Stock	Rs. 1,50,000
Closing Stock	Rs. 20,000 more than opening stock
Current Assets	Rs. 3,00,000
Current Liabilities	Rs. 2,00,000
Fixed Assets	Rs. 5,00,000

15. From the following information, prepare a summarised Balance Sheet as at March 31, 2019.

Working capital	2,40,000
Bank Overdraft	40,000
Fixed Asset to Proprietary Ratio	0.75
Reserve & Surplus	1,60,000
Current Ratio	2.5
Liquid Ratio	1.5

Answer Keys

1. (d) None of these
2. (c) To know how effectively the resources have been used

Explanation: Activity ratios measure the relative efficiency of a firm based on its assets, leverage or other such balance sheet items and are important in determining whether a company's management is doing a good enough job of generating revenues and cash from its resources.

3. (d) Gross Profit

Explanation: Gross Profit is calculated by deducting cost of revenue from operations from Revenue from operations. i.e Net sale – Cost of goods sold

4. (d) Stock turnover ratio

Explanation: Inventory turnover ratio is also known as stock turnover ratio. Inventory is wider term whereas stock is a narrow term.

5. (c) Capital Employed

Explanation: It is the value of all the assets employed in a business and can be calculated by adding fixed assets to working capital or subtracting current liabilities from total assets.

6. Ratio Analysis

7. **[By Assets Route]** Capital Employed

= Non Current Assets + Current Assets - Current Liabilities

OR

[By Liabilities Route] Capital Employed

= Share Holders' Fund + Non Current Liabilities

8. Current ratio = 4:1 (Current Asset/ Current Liability)

Quick ratio = 2.5:1 (Quick Asset / Current Liability)

Inventory = 4 - 2.5 = 1.5*

If inventory is 1.5, then Current assets = 4

If inventory is 22500, then current assets = $4 \times 22500/1.5 = 60,000$

Current Liabilities = $60,000/4 = \text{Rs } 15,000$.

Note: Quick Asset = Current Asset - Inventory

9. Let Current Liabilities (CL) be x

Current Ratio is 4 : 1, hence Current Assets = 4x

Quick Ratio is 2.5 : 1, hence Liquid Assets or Quick Assets = 2.5x

Quick Assets + Inventories = Current Assets

or $2.5x + 22,500 = 4x$

or $1.5x = 22,500$

$$x = \frac{22,500}{1.5} = 15,000$$

Thus, Current Liabilities = Rs. 15,000

Current Assets = Rs. 15,000 \times 4 = Rs. 60,000

10.

- o Current Ratio = $CA/CL = \frac{1,08,000}{54,000} = 2 : 1$.

- o Liquid Ratio = $QA/CL = 54,000/54,000 = 1 : 1$.

Liquid Assets = Total Current Assets - Inventories

= 1,08,000 - 54,000 = Rs.54,000

11. Proprietary ratio establishes the relationship between proprietors funds and total assets.

This ratio is computed as follows:

$$\text{Proprietary ratio} = \frac{\text{Proprietor's Funds or shareholder's funds}}{\text{Total assets}}$$

Proprietors funds = Liabilities Approach: Share capital + Reserves and Surplus

i. **Decrease:** Loan obtained from bank will increase the total assets but the shareholders' funds will remain the same, so proprietary ratio will decrease.

ii. **No change:** Machinery purchased for cash will increase the total assets and

simultaneously decrease the total assets, therefore proprietary ratio will remain unchanged.

- iii. **Decrease:** Redemption of preference shares will decrease total assets and shareholders' funds simultaneously, so proprietary ratio will decrease.
- iv. **Increase:** Machinery purchased by issue of equity shares will increase total assets and shareholders' funds simultaneously, so proprietary ratio will increase.

12. **For 2015 -16 :-**

Inventory Turnover Ratio = Cost of revenue from operations/Average Inventories

$$= 4,00,000/60,000 = \mathbf{6.67 \text{ times}} \text{ WN 1.}$$

*Cost of revenue from Operations = Revenue from Operations - Gross Profit

$$= 50,00,000 - 25\% \text{ of Cost of revenue from Operations}$$

$$= 50,00,000 - \left(50,00,000 \times \frac{25}{100} \right)$$

$$= 50,00,000 - 10,00,000$$

$$= \text{Rs. } 40,00,000$$

WN 2.

**Average Inventory

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

$$= \frac{5,00,000 + 7,00,000}{2}$$

$$= \text{Rs. } 6,00,000$$

For 2016 - 17 :-

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Revenue from Operations}^*, 60,00,000}{\text{Average Inventory}^{**}, 12,00,000} = \mathbf{5 \text{ times}}$$

WN 3.

*Cost of Revenue from Operations

$$= 75,00,000 - \left(75,00,000 \times \frac{25}{100} \right)$$

$$= 75,00,000 - 15,00,000$$

= Rs.60,00,000

WN 4.

**Average Inventory

$$= \frac{7,00,000 + 17,00,000}{2}$$

= Rs.12,00,000

13. Total Revenue from Operations = Cost of Revenue from Operations + Gross Profit
= Rs.2,40,000 + 25% of Rs.2,40,000 = Rs.3,00,000

Calculation of Credit Revenue from Operations:

Let Credit Revenue from Operations = x

Cash Revenue from Operations = $\frac{x}{3}$

$$x + \frac{x}{3} = 3,00,000$$

$$3x + x = 9,00,000$$

$$x = \frac{9,00,000}{4} = 2,25,000 \text{ (Credit Revenue from Operations).}$$

$$\frac{x}{3} = \frac{2,25,000}{3}$$

$$\text{Average Trade Receivables} = \frac{2,25,000}{3} = 75,000$$

Calculation of Opening and Closing Trade Receivables:

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

Let Opening Trade Receivables = x, Closing Trade Receivables = x + 3x = 4x

$$₹75,000 = \frac{x+4x}{2}$$

$$x + 4x = ₹1,50,000; x = ₹1,50,000/5 = ₹30,000 \text{ (Opening Trade Receivables)}$$

$$\text{Closing Trade Receivables} = 4x = ₹30,000 \times 4 = ₹1,20,000.$$

14. (i) Operating Ratio =

$$\frac{\text{Cost of Goods Sold} + \text{Net Sales}}{\text{Net Sales}} \times 100 = \frac{13,20,000 + 22,00,000}{22,00,000} \times 100 = 70\%$$

Working Note :

Credit Sales = 10,00,000 x 120% = Rs. 12,00,000

Net Sales = 10,00,000 + 12,00,000 = Rs. 22,00,000

Gross Profit = 22,00,000 x 40% = Rs. 8,80,000

Cost of Goods Sold = Net Sales - Gross Profit

$$= 22,00,000 - 8,80,000 = \text{Rs. } 13,20,000$$

$$\text{Operating Expenses} = 22,00,000 \times 10\% = \text{Rs. } 2,20,000$$

$$\text{(ii) Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

$$= \frac{13,20,000}{1,60,000} = \mathbf{8.25 \text{ times}}$$

Working Note :

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

$$= \frac{, , (, , ,)}{2} = \text{Rs. } 1,60,000$$

$$\text{(iii) Proprietary Ratio} = \frac{\text{Proprietary Fund}}{\text{Total Assets}}$$

$$= \frac{6,00,000}{8,00,000} = \mathbf{0.75: 1}$$

Working Note :

$$\text{Total Assets} = 3,00,000 + 5,00,000 = \text{Rs. } 8,00,000$$

15. Construction of Balance Sheet:

Liability	Rs.	Assets	Rs.
Capital	800000	Fixed Asset	7,20,000
Reserve & Surplus	160000	Stock	160000
Bank Overdraft	40000	Other Current Asset	240000
Sundry Creditors	120000		
	11,20,000		11,20,000

Working Note :

$$\text{Proprietary Ratio} = \frac{FA}{\text{Proprietary Fund}} = 0.75$$

$$\text{Fixed Asset} = 0.75 \times \text{Proprietary Fund}$$

$$\text{Net working Capital} = 0.25 \times \text{Proprietary Fund}$$

$$\text{Proprietary Fund} = 240000 / 0.25 = 960000$$

$$\text{Fixed Asset} = 0.75 \times 960000 = \mathbf{720000}$$

$$\text{Capital} = 960000 - 160000 = \mathbf{800000}$$

$$\text{Creditors} = 160000 - 40000 = \mathbf{120000}$$

Current Asset and current liability computation

$$\frac{\text{Current Asset}}{\text{Current Liability}} = \frac{2.5}{1}$$

Current Asset = 2.5 × Current liability

Working capital = C.A. - C.L.

$$240000 = 2.5 \times \text{C.L.} - \text{C.L.}$$

$$240000 = 1.5 \times \text{C.L.}$$

Current liability = 240000/1.5 = **160000**

Current Asset = 160000 × 2.5 = **400000**

Computation of Stock

$$\text{Liquid Ratio} = \frac{LA}{CL}$$

1.5 × 160000 = 400000 - Stock

Stock = **160000**
