# Chapter-4 <br> Accounting Ratio 

## Questions (Video Explained)

Q1. From the following, computer Current Ratio:
Trade Receivable (Sundry Debtors)
Prepaid Expenses
Cash and Cash Equivalents
Marketable Securities

| $1,80,000$ | Bills Payable | 20,000 |
| ---: | ---: | ---: |
| 40,000 | Sundry Creditors | $1,00,000$ |
| 50,000 | Debentures | $4,00,000$ |
| 50,000 | Inventories | 80,000 |
| $5,00,000$ | Expenses Payable | 80,000 |

Land and Building
5,00,000 Expenses Payable 80,000

Q2. Calculate Current Ratio from the following information:

| Particulars | Rs. | Particulars | Rs. |
| :--- | :---: | :--- | :---: |
| Total Assets | $5,00,000$ | Non - current Liabilities | $1,30,000$ |
| Fixed Tangible Assets | $2,50,000$ | Non - current Investment | $1,50,000$ |
| Shareholder's Funds | $3,20,000$ |  |  |

Q3. Working Capital is Rs.9,00,000; Trade Payable Rs.90,000; and Other Current Liabilities are Rs.2,10,000. Calculate Current Ratio.

Q4. Current Assets are Rs.7,50,000 and Working Capital is Rs.2,50,000. Calculate Current Ratio.

Q5. Ratio of Current Assets (Rs.3,00,000) to Current Liabilities (Rs.2,00,000) is 1.5:1. The accountant of the firm is interested in maintaining a Current Ratio of $2: 1$ by paying off a part of the Current Liabilities. Computer amount of the Current Liabilities that should be paid so that Current Ratio at the level of $2: 1$ may be maintained.

Q6. The Current Ratio of company is 3:1. State giving reason, which of the following would improve, reduce or not change the ratio ?
i. Repayment of a Current Liability.
ii. Purchased of goods on cash.
iii. Sale of office equipment for Rs.4,000 (Book value Rs.5,000)
iv. Sale of goods for Rs.11,000 (cost Rs.10,000)
v. Payment of dividend.

Q7. From the following information, calculate Liquid Ratio.

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | :---: |
| Current Assets | $2,00,000$ | Trade Receivables | $1,10,000$ |
| Inventories | 50,000 | Current Liabilities | 70,000 |
| Prepaid Expenses | 10,000 |  |  |

Q8. Current Assets and Current Liabilities of Times Ltd. are as follows:

| Particulars | Rs. | Particulars | Rs. |
| :--- | ---: | :--- | :---: |
| Cash and Cash Equivalents | 50,000 | Creditors | $3,00,000$ |
| Debtors | $3,10,000$ | Bills Payables | $1,20,000$ |
| Receivable | 30,000 | Short - term Borrowing | $1,00,000$ |
| Marketable Securities | $1,50,000$ |  |  |
| Inventories | $5,00,000$ |  | $5,20,000$ |
|  | $10,40,00$ |  |  |
|  |  |  |  |

Calculate Current Ratio and Liquid Ratio.

Q9. Current Assets Rs.3,00,000, Inventories Rs.60,000, Working Capital Rs.2,52,000.
Calculate Quick Ratio.

Q10. Quick Assets Rs.1,50,000. Inventory (Stock) Rs.40,000, Prepaid Expenses Rs.10,000, Working Capital Rs.1,20,000. Calculate Current Ratio.

Q11. X Ltd. has a Current Ratio of 3.5:1 and Quick Ratio of 2:1. If the inventories is Rs.24,000. Calculate Liabilities and Current Assets.

Q12. Quick Ratio of a company is 2:1. State giving reason which of the following transactions would (i) Improve,(ii) Reduce,(iii) Not change the Quick Ratio.
(a) Purchase of goods for cash;
(b) Purchase of goods on Credit;
(c) Sale of goods (costing Rs.10,000) for Rs.10,000
(d) Sale of goods (costing Rs.10,000) for Rs.11,000;
(e) Cash received from Debtors.

Q13. Total Assets Rs.22,00,000; Fixed Assets Rs.10,00,000; Capital Employed Rs.20,00,000.
There were no long term Investments. Calculate Current Ratio.

Debt to Equity Ratio
Q14. Calculate Debt to Equity Ratio: Equity Share Capital Rs.5,00,000; General Reserve
Rs.90,000; Accumulated Profit Rs.50,000; 10\% Debentures Rs.1,30,000; Current Liabilities Rs.1,00,000.

Q15. From the following information, calculate Debt to Equity Ratio:
Rs.
10,000 Equity Shares of Rs. 10 each fully paid 1,00,000
$5,000,9 \%$ Preference Share of Rs. 10 each fully paid 50,000
General Reserve 45,000
Surplus, i.e., Balance in Statement of Profit and Loss 20,000
$10 \%$ Debentures 75,000
Current Liabilities 50,000

Q16. When Debt to Equity Ratio is 2, state giving reason, whether this ratio will increase or decrease or will have no change in each of the following cases ?
(i) Sale of land (Book value Rs.4,00,000) for Rs.5,00,000;
(ii) Issue of Equity Share for the purchase of Plant and Machinery worth Rs.10,00,000;
(iii) Issue of Preference Share for redemption of $13 \%$ Debentures, worth Rs.10,00,000.

Q17. Total AssetsRs.12,50,000; Total Debts Rs.10,00,000; Current Liabilities Rs.5,00,000. Calculate Debt to Equity Ratio.

Q18. Capital Employed Rs.8,00,000; Shareholder's Funds Rs.2,00,000, Calculate Debt to Equity Ratio.

Q19. Balance Sheet had the following amounts as at $31^{\text {st }}$ March, 2016;

|  | Rs. |  | Rs. |
| :--- | ---: | :--- | ---: |
| $10 \%$ Preference Share Capital | $5,00,000$ | Current Assets | $12,00,000$ |
| Equity Share Capital | $15,00,000$ | Current liabilities | $8,00,000$ |
| Securities Premium Reserve | $1,00,000$ | Investment (in other companies) | $2,00,000$ |
| Reserve and Surplus | $4,00,000$ | Fixed Assets - Cost | $60,00,000$ |
| Long - term Loan from IDIB @9\% | $30,00,000$ | Depreciation Written off | $14,00,000$ |

Calculate ratio indicating the long - term and the Short - term financial position of the company.

## Total Assets to Debt Ratio

Q20. Calculate Total Assets to Debt Ratio from the following information:
Long term Debts Rs.4,00,000 ; Total Assets Rs.7,70,000
Q21. Shareholder's Funds Rs.1,60,000; Total Debts Rs.3,60,000; Current Liabilities Rs.40,000. Calculate Total Assets to Debt Ratio.

Q22. Total Debts Rs.60,00,000; Shareholder's Funds Rs.10,00,000; Reserve and Surplus Rs.2,50,000; Current Assets Rs.25,00,000; Working Capital Rs.5,00,000. Calculate total Assets to Debt ratio.

Q23. Calculate Total Assets to Debt Ratio from the following information:

|  | Rs. |  | Rs. |
| :--- | ---: | :--- | :---: |
| Total Assets | $15,00,000$ | Bills Payable | 60,000 |
| Total Assets | $12,00,000$ | Bank Overdraft | 50,000 |
| Creditors | 90,000 | Outstanding Expenses | 20,000 |

## Proprietary Ratio

Q24. From the following information, calculate Proprietary Ratio:

|  | Rs. |
| :--- | ---: |
| Equity Share Capital | $3,00,000$ |
| Preference Share Capital | $1,50,000$ |
| Reserve and Surplus | 75,000 |
| Debentures | $1,80,000$ |
| Trade Payable | 45,000 |
|  | $\mathbf{7 , 5 0 , 0 0 0}$ |
|  |  |
| Fixed Assets | $3,75,000$ |
| Short - Term | $2,25,000$ |
| Current Assets | $1,50,000$ |
|  | $\mathbf{7 , 5 0 , 0 0 0}$ |

Q25. From the following information, calculate Proprietary Ratio.

|  | Rs. |  | Rs. |
| :--- | ---: | :--- | ---: |
| Equity Share Capital | $4,50,000$ | $9 \%$ Debenture | $3,00,000$ |
| $10 \%$ Preference Share Capital | $3,20,000$ | Fixed Assets | $7,00,000$ |
| Reserve and Surplus | 65,000 | Trade Investment | $2,45,000$ |
| Creditors | $1,10,000$ | Current Assets | $3,00,000$ |

## Interest Coverage Ratio

Q26. If Profit before Interest and Tax is Rs.5,00,000 and interest on Long term Funds is
Rs.1,00,000,
find Interest Coverage Ratio.

Q27. From the following information, calculate Interest Coverage Ratio, Profit after Tax Rs.1,70,000. Tax Rs.30,000, Interest on Long term Funds Rs.50,000.

Q28. From the following information calculate interest Coverage Ratio.

|  | Rs. |
| :--- | ---: |
| 10,000 Equity Shares of Rs. 10 each | $1,00,000$ |
| $8 \%$ Preference Shares | 70,000 |
| $10 \%$ Debentures | 50,000 |
| Long - term Loans from Bank | 50,000 |
| Interest on Long - term Loans from Bank | 5,000 |
| Profit after Tax | 75,000 |
| Tax | 9,000 |

Inventory Turnover Ratio
Q29. From the following detail , calculate Inventory Turnover Ratio:

|  | Rs. |
| :--- | ---: |
| Cost of Goods Sold | $4,50,000$ |
| Opening Inventory | $1,25,000$ |
| Closing Inventory | $1,75,000$ |

Q30. Cost of Revenue from Operations (Cost of Goods Sold) Rs.5,00,000. Opening Inventory Rs.1,00,000.Calculate Inventory Turnover Ratio.

Q31. Calculate Inventory Turnover Ratio from the following:

|  | Rs. |
| :--- | ---: |
| Opening Inventory | 29,000 |
| Closing Inventory | 31,000 |
| Revenue from Operations, i.e., Sales | $3,20,000$ |
| Gross Profit Ratio 25\% |  |

Q32. From the following data, calculate Inventory Turnover Ratio:
Total Sales Rs.5,00,000; Sales Return Rs.50,000; Gross Profit Rs. 90,000 ; Closing Inventory Rs.1,00,000; Excess of closing Inventory over Opening Inventory Rs.20,000.

Q33. Rs.2,00,000 is the Cost of Revenue from Operations (Cost of Good Sold), during the year. If Inventory Turnover Ratio is 8 times, calculate inventories at the end of the year. Inventories at the end is 1.5 times than that in the beginning.

Q34. Calculate Inventory Turnover Ratio from the following information:
Opening Inventory Rs.40,000; Purchases Rs.3,20,000; and Closing Inventory Rs.1,20,000.
State, giving reason, which of the following transactions would (i) increase, (ii) decrease,
(iii) neither
a. Sale of goods for Rs. 40,000 (Cost Rs. 32,000 )
b. Increase in the value of Closing Inventory by Rs. 40,000
c. Goods purchased for Rs.80,000
d. Purchases Return Rs.20,000
e. Goods costing Rs.10,000 withdrawn for personal use.
f. Goods costing Rs.20,000 distributed as free samples.

Q35. From the following information, determine Opening and Closing Inventories: Inventory Turnover Ratio 5 Times, Total Sales Rs.2,00,000, Gross Profit Ratio 25\%, Closing Inventory is more by Rs.4,000 than the Opening Inventory.

Q36. Following figures have been extracted from Shivalika Mills Ltd. Inventory in the beginning of the year Rs.60,000.
Inventory at the end of the year Rs.1,00,000. Inventory Turnover Ratio 8 times.
Selling price $25 \%$ above cost.
Compute amount of gross profit \& sales.

Q37. Inventory Turnover Ratio 5 times, Cost of Revenue from Operations (Cost of Goods Sold)

Rs.18,90,000. Calculate Opening Inventory and Closing Inventory if Inventory at the end is 2.5 times more than that in the beginning.

Q38. Calculate Inventory Turnover Ratio in each of the following alternative cases:
Case 1: Cash Sales 25\% of Credit Sales; Credit Sales Rs.3,00,000; Gross Profit 20\% on Revenue from Operations, i.e., Net Sales; Closing Inventory Rs.1,60,000; Opening Inventory Rs.40,000.
Case 2: Cash Sales 20\% of Total Sales Rs.4,50,000; Gross Profit 25\% on Cost Operating Inventory Rs.37,500, Closing Inventory Rs.1,12,500

Trade Receivables Turnover Ratio
Q39. Credit Revenue from Operations, i.e., Net Credit Sales for the year Debtors

Calculate Trade Receivables Turnover Ratio.

Q40. Calculate Trade Receivables Turnover Ratio from the following information:

|  | 2015(Rs.) | 2016(Rs.) |
| :--- | ---: | ---: |
| Sundry Debtors | 28,000 | 25,000 |
| Bills Receivable | 7,000 | 15,000 |
| Provision for Doubtful Debts | 2,800 | 2,500 |
| Total Sales Rs.1,00,000; Sales Return Rs.1,500; Cash Sales Rs.23,500 |  |  |

Q41. Closing Trade Receivables Rs.1,00,000; Cash Sales being 25\% of Credit Sales; Excess of Closing Trade Receivables over Opening Trade Receivables Rs.40,000; Revenue from Operations, i.e., Net Sales Rs.6,00,000.
Calculate Trade Receivables Turnover Ratio.

Q42. Closing Trade Receivables Rs.4,00,000; Cash Sales being $25 \%$ of Credit Sales; Excess of Closing Trade Receivables over Opening Trade Receivables Rs.2,00,000; Revenue from Operations, i.e., Net Sales Rs.15,00,000.
Calculate Trade Receivables Turnover Ratio.

Q43. A limited company made Credit Sales of Rs. $4,00,000$ during the financial period. If the collection period is 36 days and year is assumed to be 360 days, calculate:
i. Trade Receivables Turnover Ratio;
ii. Average Trade Receivable;
iii. Trade Receivable at the end when Trade Receivable at the end are more than that in the beginning by Rs.6,000.

Q44. Calculate Trade Receivable Turnover Ratio in each of the following alternative cases:
Case 1: Net Credit Sales Rs.4,00,000; Average Trade Receivable Rs.1,00,000.

Case 2: Revenue from Operations (Net Sales) Rs.30,00,000; Cash Revenue from Operations,
i.e., Cash Sales Rs.6,00,000; Opening Trade Receivables Rs.2,00,000; Closing Trade Receivable Rs.6,00,000.
Q45. From the following given below, calculate Trade Receivable Turnover Ratio. Credit Revenue from Operations, i.e., Credit Sales Rs.8,00,000; Opening Trade Receivables Rs.1,20,000, and Closing Trade Receivables Rs.2,00,000.
State giving reason, which of the following would increase, decrease or not change Trade Receivables Turnover Ratio.
i. Collection from Trade Receivables Rs.40,000.
ii. Credit Revenue from Operations, i.e., Credit Sales Rs.80,000.
iii. Sales return Rs.20,000.
iv. Credit Purchase Rs.1,60,000.

## Trade Payable Turnover Ratio

Q46. Calculate Trade Payable Turnover Ratio \& Average debt period from following :

|  | $2015($ Rs. ) | 2016(Rs.) |
| :--- | ---: | ---: |
| Sundry Creditors | $1,50,000$ | $4,50,000$ |
| Bills Payable | 50,000 | $1,50,000$ |

Total Purchase Rs.21,00,000; Purchase Return Rs.1,00,000 ; Cash
Purchase Rs.4,00,000

Q47. Calculate Trade Payable Turnover Ratio for the year 2015-16 in each of the alternative cases:

Case 1: Closing Trade Payables Rs.45,000; Net Purchases Rs.3,60,000; Purchases Return Rs.60,000; Cash Purchases Rs.90,000.
Case 2: Opening Trade Payables Rs.15,000; Closing Trade Payable Rs.45,000; Net Purchases Rs.3,60,000.
Case 3: Closing Trade Payables Rs.45,000; Net Purchases Rs.3,60,000.
Case 4: Closing Trade Payable (including Rs.25,000 due to a supplier of machinery) Rs.55,000; net Credit Purchases Rs.3,60,000

## Working Capital Turnover Ratio

Q48. From the following information, calculate Working Capital Turnover Ratio.
Marketable Securities Rs.1,50,000; Inventory Rs.50,000; Sundry Debtors Rs.2,00,000;
Bills Receivable Rs.50,000; Cash at Bank Rs.1,00,000; Cash in Hand Rs.50,000; Bills
Payable Rs.30,000; Sundry Creditors Rs.2,00,000; Provision for Tax Rs.20,000; Sales Rs.23,00,000; Return Inward Rs.2,00,000.

Q49. Equity Share Capital Rs.15,00,000; Gross Profit on Revenue from Operations, i.e., Net Sales $33 \frac{1}{3} \%$; Cost of Revenue from Operations or Cost of Goods Sold Rs.20,00,000; Current Assets Rs.10,00,000; Current Liabilities Rs.2,50,000. Calculate Working Capital Turnover Ratio.

Q50. Gross Profit at 25\% on cost; Gross Profit Rs.5,00,000; Equity Share Capital Rs.10,00,000;

Reserve and Surplus Rs.2,00,000; Long-term Loan Rs.3,00,000; Fixed Assets (Net) Rs.10,00,00. Calculate Working Capital Turnover Ratio.

Q51. Calculate Working Capital Turnover Ratio from the following information: Revenue from Operations Rs.30,00,000; Current Assets Rs.12,50,000; Total Assets Rs.20,00,000; Non-current Liabilities Rs.10,00,000, Shareholder's Funds Rs.5,00,000.

## Gross Profit Ratio

Q52. Compute Gross Profit Ratio from the following information:
Cost of Revenue from Operations (Cost of Goods Sold) Rs.5,40,000; Revenue from Operations (Net Sales) Rs.6,00,0000.

Q53. Compute Gross Profit Ratio from the following information:
Revenue from Operations, i.e., Net Sales = Rs.4,00,000; Gross Profit $25 \%$ on Cost.
Q54. Calculate Gross Profit Ratio from the following data:
Cash Sales are 20\% of Total Sales; Credit Sales are Rs.5,00,000; Purchases are Rs.4,00,000; Excess of Closing Inventory over Opening Inventory Rs.25,000.

Q55. From the following information, calculate Gross Profit Ratio:

|  | Rs. |  | Rs. |
| :--- | ---: | :--- | ---: |
| Credit | $5,00,000$ | Decrease in Inventory | 10,000 |
| Purchases | $3,00,000$ | Returns Outward | 10,000 |
| Carriage Inwards | 10,000 | Wages | 50,000 |
|  |  | Rate of Credit Sale to Cash Sale | $4: 1$ |

Q56. Calculate Gross Profit Ratio from the following data:
Average Inventory Rs.3,20,000; Inventory Turnover Ratio 8 Times; Average Trade Receivables Rs.4,00,000; Trade Receivables Turnover Ratio 6 Times; Cash Sales $25 \%$ of Net Sales.

Q57. (i) Revenue from Operations: Cash Sales Rs.4,20,000; Credit Sales Rs.6,00,000; Return Rs.20,000. Cost of Revenue from Operation or Cost of Goods Sold Rs.8,00,000. Calculate Gross Profit Ratio.
(ii) Average Inventory Rs.1,60,000; Inventory Turnover Ratio 6 Times; Selling Price 25\% above cost. Calculate Gross Profit Ratio.
(iii) Opening Inventory Rs.1,00,000; Closing Inventory Rs.60,000; Inventory Turnover Ratio 8 Times; Selling Price $25 \%$ above cost. Calculate Gross Profit Ratio.

## Operating Ratio

Q58. Cost of Revenue from Operations (Cost of Goods Sold) Rs.3,00,000. Operating Expenses Rs.1,20,000, Revenue from Operations; Cash Sales Rs.5,20,000. Calculate Operating Ratio.

Q59. (i) Cost of Revenue from Operations (Cost of Goods Sold) Rs.2,20,000; Revenue from Operations (Net Sales) Rs.3,20,000; Selling Expenses Rs.12,000; Office Expenses Rs.8,000; Deprecation Rs.6,000. Calculate Operating Ratio.
(ii) Revenue from Operations, Cash Sales Rs.4,00,000; Credit Sales Rs.1,00,000; Gross Profit Rs.1,00,000; Office and Selling Expenses Rs.50,000. Calculate Operating Ratio.

Q60. Operating Ratio 92\%; Operating Expenses Rs.94,000; Revenue from Operations Rs. $6,00,000$; Sales Return Rs. 40,000 . Calculate Cost of Revenue from Operations (Cost of Goods Sold).

Q61. Calculate Operating Ratio from the following information: Operating Cost Rs.6,80,000; Gross Profit 25\%; Operating Expenses Rs.80,000.

## Operating Profit Ratio

Q62. Calculate Operating Profit Ratio from the following information:

| Opening Inventory | Rs. $1,00,000$ | Closing Inventory | Rs.1,50,000 |
| :--- | ---: | :--- | ---: |
| Purchases | Rs. $10,00,000$ | Loss by fire | Rs.20,000 |
| Revenue from Operations, i.e., Net Sales | Rs.14,70,000 | Dividend Received | Rs.30,000 |
| Administrative and Selling Expenses | Rs.1,70,000 |  |  |

Q63. Calculate Operating Profit Ratio from the following:

| Revenue from Operations (Net Sales) | Rs. |
| :--- | ---: |
| Cost of Revenue from Operations (Cost of Goods Sold) | $2,00,000$ |
| Wages | $1,00,000$ |
| Office and Administrative Expenses | 50,000 |
| Interest on Borrowing | 5,000 |

Q64. What will be the Operating Profit Ratio, if Operating Ratio is $82.59 \%$ ?

Q65. Calculate Operating Profit Ratio in each of the following alternative cases:
Case 1: Revenue from Operations (Net Sales) Rs.10,00,000; Operating Profit Rs.1,50,000.
Case 2: Revenue from Operations (Net Sales) Rs.6,00,000; Operating Cost Rs.5,10,000.
Case 3: Revenue from Operations (Net Sales) Rs.3,60,000; Gross Profit 20\% on Sales; Operating Expenses Rs.18,000.
Case 4: Revenue from Operations (Net Sales) Rs.4,50,000; Cost of Revenue from Operations Rs.3,60,000; Operating Expenses Rs.22,500.
Case 5: Cost of Goods Sold, i.e., Cost of Revenue from Operations Rs.8,00,000; Gross Profit 20\% on Sales; Operating Expenses Rs.50,000.

## Net Profit Ratio

Q66. Cash Sales Rs.2,20,000; Credit Sales Rs.3,00,000; Sales Return Rs.20,000; Gross Profit Rs.1,00,000; Operating Expenses Rs.25,000; Non-Operating Expenses Rs.5,000. Calculate Net Profit Ratio.

Q67. Revenue from Operations, i.e., Net Sales Rs.8,20,000; Return Rs.10,000; Cost of Revenue from Operations (Cost of Goods Sold) Rs.5,20,000; Operating Expenses Rs.2,09,000; Interest on Debenture Rs.40,500; Gain (Profit) on Sale of a Fixed Assets

Rs.81,000. Calculate Net Profit Ratio.

## Return on Investment

Q67. Net Profit before Interest and Tax Rs.6,00,000; Net Fixed Assets Rs.20,00,000; Net Working Capital Rs.10,00,000; Current Assets Rs.11,00,000. Calculate Return on investment.

Q68. Net Profit before Interest and Tax Rs.4,00,000; 15\% Long-term Debt Rs.8,00,000; Shareholders' Funds Rs.4,00,000. Calculate Return on Investment.

Q69. Calculate Return on Investment (ROI) from the following details: Net Profit after Tax Rs.6,50,000; Rate of Income Tax 50\%; 10\% Debenture of Rs. 100 each Rs.10,00,000; Fixed Assets at cost Rs.22,50,000; Accumulated Depreciation on Fixed Assets up to date Rs.2,50,000; Current Assets Rs.12,00,000; Current Liabilities Rs.4,00,000.

