Chapter - 10

Accounting Ratios

Short Answer Questions

1. What do you mean by Ratio Analysis?
2. What are various types of ratios?
3. What relationships will be established to study:
a. Inventory turnover
b. Trade receivables turnover
c. Trade payables turnover
d. Working capital turnover
4. The liquidity of a business firm is measured by its ability to satisfy its long-term obligations as they become due. What are the ratios used for this purpose?
5. The average age of inventory is viewed as the average length of time inventory is held by the firm for which explain with reasons.

Long Answer Questions

1. What are liquidity ratios? Discuss the importance of current and liquid ratio.
2. How would you study the Solvency position of the firm?
3. What are various profitability ratios? How are these worked out?
4. The current ratio provides a better measure of overall liquidity only when a firm's inventory cannot easily be converted into cash. If inventory is liquid, the quick ratio is a preferred measure of overall liquidity. Explain.

I. MCQs

1. Two basic measures of liquidity are:

(A) Inventory turnover and Current ratio
(B) The current ratio and Quick ratio
(C) Gross Profit ratio and Operating ratio
(D) The current ratio and average collection period

2. The current ratio is:

(A) Solvency Ratio
(B) Liquidity ratio
(C) Activity Ratio
(D) Profitability Ratio

3. Current Ratio is :

(A) Liquid Assets/Current Assets
(B) Fixed Assets/Current Assets

(C) Current Assets/Current Liabilities
(D) Liquid assets/Current Liabilities

4. Liquid Assets do not include:

(A) Bills Receivable
(B) Debtors
(C) Inventory
(D) Bank Balance

5. Ideal Current Ratio is:

(A) 1:1
(B) 1:2
(C) 1:3
(D) 2:1

6. Working Capital is the :

(A) Cash and Bank Balance
(B) The capital borrowed from Banks
(C) Difference between Current Assets and Current Liabilities
(D) Difference between Current Assets and Fixed assets

7. Current assets include only those assets which are expected to be realized within……

(A) 3 months
(B) 6 months
(C) 1 year
(D) 2 years

8.A Company's liquid assets are Rs.5,00,000 and its current liabilities are Rs.3,00,000.Thereafter, it paid Rs.1,00,000 to its trade payables. Quick ratio will be:

(A) 1.33:1
(B) 2.5:1
(C) 1.67:1
(D) 2:1

9.A Company's Quick Ratio is 1.5:1; Current Liabilities are Rs.2,00,000 and Inventory is Rs.1,80,000.Current Ratio will be:

(A) 0.9:1

(B) 1.9:1
(C) 1.4:1
(D) 2.4:1

10.Fixed Assets Rs.5,00,000; Current Assets Rs.3,00,000; Equity Share Capital Rs.4,00,000; Reserve Rs.2,00,000;Long –term debts Rs.40,000.Proprietory Ratio will be:

(A) 75%
(B) 80%
(C) 125%
(D) 133%

11.If Debt equity ratio exceeds ……………., it indicates risky financial position.

(A) 1:1
(B) 2:1
(C) 1:2
(D) 3:1

12.Equity Share Capital Rs.20,00,000; Reserves Rs.5,00,000; Debentures Rs.10,00,000; Current Liabilities Rs.8,00,000. Debt-equity ratio will be:

(A) 0.4 : 1

(B) 0.32 : 1

(C) 0.72 : 1

(D) 0.5 : 1

13. On the basis of following data, the Debt-Equity Ratio of a Company will be: Equity Share Capital Rs.5,00,000; General Reserve Rs.3,20,000; Preliminary Expenses Rs.20,000; Debentures Rs.3,20,000; Preliminary Expenses Rs.20,000; Debentures Rs.3,20,000; Current Liabilities Rs.80,000.

(A) 1:2

(B) 0.52:1

(C) 0.4:1

(D) 0.37:1

14. On the basis of the following information received from a firm, its Proprietory Ratio will be:

Fixed Assets Rs.3,30,000; Current Assets Rs.1,90,000; Preliminary Expenses Rs.30,000; Equity share Capital Rs.2,44,000; Preference Share capital Rs.1,70,000; Reserve Fund Rs.58,000.

(A) 70%
(B) 80%
(C) 85%
(D) 90%

15. Based on the following information received from a firm, its Total Assets-Debt ratio will be:

(A) 40%

(B) 60%

(C) 30%

(D) 70%

16. Opening Inventory Rs.1,00,000; Closing Inventory Rs.1,50,000; Purchases Rs.6,00,000; Carriage Rs.25,000; wages Rs.2,00,000. Inventory Turnover Ratio will be:

(A) 6.6 Times

(B) 7.4 Times

(C) 7 Times

(D) 6.2 Times

17. Revenue from Operations Rs.2,00,000; Inventory Turnover ratio 5; Gross Profit 25%. Find out the value of Closing Inventory, if the Closing Inventory is Rs.8,000 more than the Opening Inventory.

(A) Rs.38,000

(B) Rs.22,000

(C) Rs.34,000

(D) Rs.26,000

18.Total revenue from operations Rs.9,00,000; Cash revenue from operations Rs.3,00,000; Debtors Rs.1,00,000; Debtors Rs.1,00,000; B/R Rs.20,000. Trade Receivables Turnover Ratio will be:

(A) 5 Times

(B) 6 Times

(C) 7.5 Times

(D) 9 Times

19. A firm's credit revenue from operations is Rs.3,60,000, cash revenue from operations is Rs.70,000. Cost of revenue from operations is Rs.3,61,200. Its gross profit ratio will be:

(A) 11%

(B) 15%

(C) 18%

(D) 16%

20. Revenue from Operations Rs.6,00,000; Gross Profit 20%; Office Expenses Rs.30,000;Selling Expenses Rs.48,000.Calculate operating ratio.

(A) 80%

(B) 85%

(C) 96.33%

(D) 93%

II. NUMERICAL PROBLEMS

Question 1:

Gross Profit at 25% on cost; Gross profit Rs. 5,00,000; Equity Share Capital Rs. 10,00,000; Reserves and Surplus 2,00,000; Long-term Loan 3,00,000; Fixed Assets (Net) Rs. 10,00,000. Calculate Working Capital Turnover Ratio

Question 2:

State giving reasons, which of the following transactions would improve, reduce or not change the Current Ratio, if Current Ratio of a company is (i) 1:1; or (ii) 0.8:1:
(a) Cash paid to Trade Payables.

(b) Purchase of Stock-in-Trade on credit.
(c) Purchase of Stock-in-Trade for cash.
(d) Payment of Dividend payable.
(e) Bills Payable discharged.
(f) Bills Receivable endorsed to a Creditor.
(g) Bills Receivable endorsed to a Creditor dishonored.

Question 3:

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; Credit Sales Rs.4,50,000; Gross Profit 25% on Cost; Opening Inventory Rs.37,500; Closing Inventory Rs.1,

Question 4:

Credit Revenue from Operations, i.e., Net Credit Sales for the year	1,20,000
Debtors	12,000
Bill Receivable	8,000

Calculate the Trade Receivables Turnover Ratio.

Question 5:

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 the Trade Receivables Turnover Ratio.

Question 6:

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.

Question 7:

(i) Revenue from Operations: Cash Sales Rs.4,20,000; Credit Sales Rs.6,00,000; Return Rs.20,000. Cost of Revenue from Operations or Cost of Goods Sold Rs.8,00,000. Calculate Gross Profit Ratio.
(ii) Average Inventory Rs.1,60,000; Inventory Turnover Ratio is 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.

Question 8:

Gross Profit Ratio of a company is 25%. State giving reason, which of the following transactions will (a) increase or (b) decrease or (c) not alter the Gross Profit Ratio.
(i) Purchases of Stock-in-Trade Rs.50,000.
(ii) Purchases Return Rs.15,000.
(iii) Cash Sale of Stock-in-Trade Rs.40,000.
(iv) Stock-in-Trade costing Rs.20,000 withdrawn for personal use.
(v) Stock-in-Trade costing Rs.15,000 distributed as free sample.

Question 9:

From the following information, calculate Operating Ratio:

Cost of Revenue		Revenue from Operation:	
from Operations (Cost of Goods Sold)	Rs.52,000	Gross Sales	Rs.88,000
Operating Expenses	Rs.18,000	Sales Return	Rs. 8,000

Question 10:

Calculate Cost of Revenue from Operations from the following information:
Revenue from Operations Rs. 12,00,000; Operating Ratio 75%; Operating Expenses Rs. 1,00,000.

Question 11:

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

Question 12:

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		

Question 13:

Calculate Operating Profit Ratio from the Following:

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

Question 14:

What will be the Operating Profit Ratio, if Operating Ratio is 82.59%?

Question 15:

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 4: 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.

Question 16:

Revenue from Operations Rs. 9,00,000; Gross Profit 25% on Cost; Operating Expenses Rs. 45,000. Calculate Operating Profit Ratio.

Question 17:

Operating Cost Rs. 3,40,000; Gross Profit Ratio 20%; Operating Expenses Rs. 20,000. Calculate Operating Profit Ratio.

Question 18:

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 incomes Rs. 30,000; Non-operating Expenses Rs. 5,000. Calculate Net Profit Ratio.

Question 20:

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 Debentures Rs. 40,500; Gain (Profit) on Sale of a Fixed Asset Rs. 81,000. Calculate Net Profit Ratio.

Question 21:

Revenue from Operations Rs.4,00,000; Gross Profit Ratio 25%; Operating Ratio 90%. Non-operating Expenses Rs.2,000; Non-operating Income Rs.22,000. Calculate Net Profit Ratio.

Question 22:

Calculate Return on Investment (ROI) from the following details: Net Profit after Tax Rs. 6,50,000; Rate of Income Tax 50%; 10% Debentures 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.

Question 23:

Net Profit before Interest and Tax Rs.2,50,000; Capital Employed Rs.10,00,000. Calculate Return on Investment.

Question 24:

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.

Question 25:

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.

Question 26:

State with reason whether the following transactions will increase, decrease, or not change the 'Return on Investment' Ratio:
(i) Purchase of machinery worth Rs.10,00,000 by the issue of equity shares.
(ii) Charging depreciation of Rs.25,000 on machinery.
(iii) Redemption of debentures by cheque Rs.2,00,000.
(iv) Conversion of 9% Debentures of Rs.1,00,000 into equity shares.