CBSE Test Paper 01

Ch-10 Statement Analysis Tools and Accounting Ratios

1. Operating cost – Operating Expenses = ?
   a. Net Profit
   b. Operating Profit
   c. Cost of Revenue from Operations
   d. Gross Profit
2. Debt Equity Ratio is expressed in ______
   a. Percentage
   b. Fraction
   c. Time
   d. None of these
3. Which of the following is a liquidity ratio?
   a. Quick ratio
   b. Inventory turnover
   c. P/E- ratio
   d. Equity multiplier
4. Current Liabilities are not required to calculate the ....
   a. Current Ratio
   b. Quick Ratio
   c. Both Current Ratio and Quick Ratio
   d. Interest Coverage Ratio
5. Followings are the solvency ratio except
   a. Quick Ratio
   b. Proprietary Ratio
   c. Debt equity ratio
   d. Total Assets to Debt Ratio

6. 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%

7. Opening Stock Rs. 29,000; Closing Stock Rs. 31,000; Sales Rs. 3,20,000; Gross Profit Ratio 25% on sales. Calculate
   i. Inventory Turnover Ratio
   ii. Average Age of Inventory.
8. Calculate ‘Gross Profit Ratio’ from the following information:

	Rs.
Net Revenue from Operations	80,000
Cost of Revenue from Operations	60,000
Operating Expenses	10,000
Indirect Expenses	60,000

9. In case a bill receivable is dishonoured, elucidate whether this ratio will improve, decline or will have no change if the current ratio is 2: 1.
10. What do Solvency Ratios indicate?
11. From the following information, calculate any two of the following ratios
    i. Current ratio
    ii. Inventory Turnover ratio
    iii. Debt equity ratio

    Information

    Revenue from operations (Net sales) Rs. 5,00,000, opening inventory Rs. 7,000, closing inventory Rs. 4,000 more than the opening inventory, net purchase Rs. 1,00,000 less than revenue from operations, operating expenses Rs. 30,000, liquid assets Rs. 75,000, prepaid expenses Rs. 2,000, current liabilities Rs. 60,000, 9% debentures Rs. 3,00,000, long-term loan from bank Rs. 1.00,000, equity share capital Rs. 10,00,000 and 8% preference share capital Rs. 2,00,000.

12. 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.

13. i. The quick ratio of a company is 1.5 : 1. State with reason which of the following transactions would (a) increase (b) decrease or (c) not change the ratio
        a. Paid rent Rs. 3,000 in advance.
        b. Trade receivables included a debtor Shri Ashok who paid his entire amount due Rs. 9,700.
    ii. From the following information compute 'proprietary ratio'.

Information	Amt (Rs.)
Long-term borrowings	2,00,000
Long-term provisions	1,00,000
Current liabilities	50,000
Non-current assets	3,60,000
Current assets	90,000

14. Following information is extracted from the statement of profit and loss of gold coin Ltd. for the year ended 31st March, 2015:

Particulars	31st March 2015	31st March 2014
Revenue from operations	Rs. 60,00,000	Rs. 45,00,000
Employee benefit expenses	Rs. 30,00,000	Rs. 22,50,000
Depreciation	Rs. 7,50,000	Rs. 6,00,000
Other expenses	Rs. 15,50,000	Rs. 10,00,000
Tax rate	30%	30%

Prepare a comparative statement of profit and loss.

Answer

1. c. Cost of Revenue from Operations, **Explanation:** Operating cost is calculated by adding cost of goods sold and operating expenses. Therefore operating cost - operating expenses = cost of revenue from operations
2. b. Fraction, **Explanation:** Debt Equity Ratio is expressed in Fraction, the formula will be debt/ equity
3. a. Quick ratio, **Explanation:** Quick Ratio is also known as liquid ratio. Formula: Liquid Assets/ Current Liabilities
4. d. Interest Coverage Ratio, **Explanation:** Interest coverage ratio is calculated by dividing a company's earnings before interest and taxes by the company's interest expenses for the same period.
5. a. Quick Ratio, **Explanation:** Solvency ratios indicates the company's ability to meet long term debts while quick ratio indicates the company's ability to meet short term debts.
6. Interest Coverage Ratio $= \frac{\text{Net Profit before Interest} \backslash \text{Tax}}{\text{Interest on Long Term Debt}}$

   Interest Coverage Ratio = $\frac{Rs. 2,20,000 (W.N.)}{Rs. 20,000}$

   = 11 Times

   Working Note :

   Calculation of Net Profit Before Interest And Tax :

Profit After Tax	= 1,00,000
(+)Tax (50% of Profit before Tax)	= 1,00,000
Profit before Tax	= 2,00,000
(+)Interest	= 20,000
Profit before Interest and Tax	= 2,20,000

7. **Inventory Turnover Ratio** = $\frac{\text{Cost of Sales}}{\text{Average Stock}}=\frac{2,40,000}{30,000}$ = **8 times**

   Cost of Sales = Sales - Gross Profit

   = Rs. 3,20,000 - 25% of 3,20,000

   =Rs. 3,20,000 - 80,000

   = Rs. 2,40,000

   Average Stock = $\frac{29,000+31,000}{2}$ = Rs. 30,000

   Average Age of Inventory

   = $\frac{365}{\text{Inventory Turnover Ratio}}=\frac{365}{8}$ = 46 days.

8. Gross Profit Ratio = $\frac{\text{Gross Profit}}{\text{Net Sales /Net Revenue from Operations}}\times 100$

   Gross profit= Rs. 80,000 - 60,000 = Rs. 20,000

   (20000/80000 × 100) = 25%

9. No change. In case a bill receivable is dishonoured, the current ratio will have no change because it would not affect either, assets or current liabilities. Because bills receivable decreases and debtors increase by the same amount. To calculate the ratio, analysts compare a company's current assets to its current liabilities.

10. Solvency Ratios are calculated to judge the long-term solvency of the business. It indicates the ability of a business firm to meet its long term liabilities. It is calculated by dividing a company's cash flow or after-tax net operating income by its total debt obligations.

11. (i)For Current Ratio first there is a need to find the value of current assets than calculated as follows:-

    Current Ratio $=\frac{\text{Current Assets}}{\text{Current Liabilities}}$
    $=\frac{88,000}{60,000}=1.47:1$
    *Curient Assets = Liquid Assets + Closing Inventory ** + Prepaid Expenses

    = 75,000 + 11,000 + 2,000

    = Rs. 88,000

    **Closing Inventory = Opening Inventory + 4,000

    = 7,000 + 4,000

= Rs. 11,000

(ii)For Inventory Turnover Ratio first there is a need to find the value of Cost of goods sold & Average Inventory both than calculated as follows:-

Inventory Turnover Ratio $= \frac{\text{Cost of Revenue from Operations (Cost of goods sold)}}{\text{Average lnventory}}$

$= \frac{3{,}96{,}000}{9{,}000} = 44$ times.

*Cost of Revenue from Operations = Opening Inventory + Net Purchases - Closing Inventory

= 7,000 + (5,00,000 - 1,00,000) - 11,000 = Rs. 3,96,000

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

$= \frac{7{,}000+11{,}000}{2} = Rs. 9,000$

(iii)For Debt Equity Ratio first there is a need to find the value of Debt & Equity both than calculated as follows:-

Debt Equity Ratio $= \frac{\text{Debt}}{Equity} or \frac{\text{Long-term Debts or Loans}}{\text{Shareholders' Funds}}$

$= \frac{4{,}00{,}000}{12{,}00{,}000} = 0.33 : 1$

*Long-term Debts = 9% Debentures + Long-term Loan from Bank

= 3,00,000 + 1,00,000 = Rs. 4,00,000

**Shareholders' Funds = Equity Share Capital + Preference Share Capital

= 10,00,000 + 2,00,000 = Rs. 12,00,000

12. 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.

Proprietory ratio establishes the relationship between proprietors funds and total assets.

This ratio is computed as follows:

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

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

13. i. a. Rent paid in advance is a current asset not quick assets therefore, cash is only going to reduce so will the quick assets and it will also bring reduction in quick ratio.
   b. No change will be seen in the ratio
   Reason: because there is a simultaneous increase and decrease in current assets by the same amount i.e. cash and trade receivables amounting to rupees 9700. Therefore current assets will be unaffected.
   ii. Proprietary Ratio = (shareholders fund /Total assets) =(100000/450000) 0.22: 1
   Working notes: Calculation of Shareholders' Funds

By Assets Approach	Amt (Rs.)
Non-current Assets	3,60,000
Current Asset	90,000
Total Assets	4,50,000
(-) Current Liabilities	(50,000)
(-) Long-term Borrowings	(2,00,000)
(-) Long-term Provisions	(1,00,000)
Shareholders' Funds	Rs. 1,00,000

14. **Comparative statement of Profit and Loss**

Particulars	Note No.	31.03.14	31.03.15	Absolute change	Percentage change
		Rs.	Rs.	Rs.	%
		(A)	(B)	(C) = (B-A)	(D) = (C/A) x 100

I. Revenue from operation		45,00,000	60,00,000	15,00,000	33.33%
II. Expenses:					
Employee benefit expense		22,50,000	30,00,000	7,50,000	33.33%
Depreciation		6,00,000	7,50,000	1,50,000	25%
Other expenses		10,00,000	15,50,000	5,50,000	55%
Total		38,50,000	53,00,000	14,50,000	37.66%
III. Profit before Tax (I-II)		**6,50,000**	**7,00,000**	**50,000**	7.69%
Less : Tax (30%)		1,95,000	2,10,000	15,000	7.69%
IV. Profit after tax (III-IV)		**4,55,000**	**4,90,000**	**35,000**	7.6%