EX. 1 X Ltd. has a current ratio of 3.5:1 and quick ratio of 2:1. If excess of current assets over quick assets represented by stock is Rs. 1,50,000, calculate current assets and current liabilities.

Solution

Let Current Liabilities = x
Current Assets = 3.5x
And Quick Assets = 2x
Stock = Current Assets – Quick Assets
1,50,000 = 3.5x – 2x
1,50,000 = 1.5x
x = Rs.1,00,000
Current Assets = 3.5x = 3.5 × 1,00,000 = Rs. 3,50,000.

EX.2 Calculate the current ratio from the following information :
Working capital Rs. 9,60,000; Total debts Rs.20,80,000; Long-term Liabilities Rs.16,00,000; Stock Rs. 4,00,000; prepaid expenses Rs. 80,000.

Solution

Current Liabilities = Total debt- Long term debt
= 20,80,000 – 16,00,000
= 4,80,000
Working capital = Current Assets – Current liability
9,60,000 = Current Assets – 4,80,000
Current Assets = 14,40,000

Quick Assets = Current Assets - (stock + prepaid expenses)
= 14,40,000 - (4,00,000 + 80,000)
= 9,60,000

Current ratio = Current Assets / Current liabilities
= 14,40,000 / 4,80,000
= 3:1

Quick ratio = Quick Assets / Current liabilities
= 9,60,000 / 4,80,000
= 2:1

EX.3 Calculate Debt Equity, from the following information:
10,000 preference share of Rs. 10 each Rs. 1,00,000

5,000 equity shares of Rs. 20 each	Rs. 1,00,000
Creditors	Rs. 45,000
Debentures	Rs. 2,20,000
Profit and Loss accounts (Cr.)	Rs. 70,000

Solution

Debt = Debentures = Rs. 2,20,000

Equity = Equity share capital + Preferences Share Capital + profit and Loss accounts

= Rs. 1,00,000 + Rs. 1,00,000 + Rs. 70,000
= Rs. 2,70,000

Debt Equity Ratio = Long term debt/ shareholders' funds
= Rs. 2,20,000 / Rs. 2,70,000
= 0.81:1

EX.4 Calculate Debt Equity Ratio, from the following information :

Total Debts Rs. 3,00,000; Total assets Rs. 5,40,000; Current liabilities Rs. 70,000.

Solution

Long-term Debt = Total Debt – Current Liabilities
= Rs. 3,00,000 – Rs. 70,000 = Rs. 2,30,000

Shareholders Funds = Total Assets – Total Debts
= Rs. 5,40,000 – Rs. 3,00,000
= Rs. 2,40,000

Debt Equity Ratio = Long term debt/ Shareholders' funds
= Rs. 2,30,000/Rs. 2,40,000
= 0.96:

EX.5 Shareholders' funds Rs. 80,000; Total debts Rs. 1,60,000; Current liabilities Rs. 20,000. Calculate Total assets to debt ratio.

Solution

Long term debt = Total Debt - Current liabilities
= Rs. 1,60,000- Rs. 20,000
= Rs. 1,40,000

Total Assets = Shareholders' funds + Total debt
= Rs. 80,000 + Rs. 1,60,000
= Rs. 2,40,000

Total Assets to debt ratio = Total Assets/ Debt
= Rs. 2,40,000 / Rs. 1,40,000
= 12:7
= 1.7:1

EX.6 From the following balance sheet of a company, calculate debt equity ratio, total assets to debt ratio and proprietary ratio

Balance Sheet of X ltd as on 31.12.2007

Preference Share Capital	7,00,000	Plant and Machinery	9,00,000
Equity Share Capital	8,00,000	Land and Building	4,20,000
Reserves	1,50,000	Motor Car	4,00,000
Debentures	3,50,000	Furniture	2,00,000
Current Liability	2,00,000	Stock	90,000
		Debtors	80,000
		Cash and Bank	1,00,000
		Discount on Issue of Shares	10,000
	22,00,000		22,00,000

Solution

Debt equity Ratio = Long-term Debt/Equity
Total Assets Ratio= Total Assets / long term Debt
Proprietary Ratio = Shareholders Funds/Total assets
Debt equity ratio = Rs. 3,50,000 / Rs. 16,40,000 = 0.213
Total Assets Ratio= Rs. 21,90,000 / Rs. 3,50,000 = 6.26
Proprietary Ratio = Rs. 16,40,000 / Rs. 21,90,000 = 0.749

EX.7 From the following information, calculate Debt Equity Ratio, Debt Ratio, Proprietary Ratio and Ratio of Total Assets to Debt.

Balance Sheet as on December 31, 2006

Equity share Capital	3,00,000	Fixed Assets	4,50,000
Preference Share Capital	1,00,000	Current Assets	3,50,000
Reserves	50,000	Preliminary Expenses	15,000
Profit & loss A/C	65,000		
11 % Mortgage Loan	1,80,000		
Current liabilities	1,20,000		
	8,15,000		8,15,000

Solution

Shareholders Funds = Equity Shares capital + Preference Shares capital + Reserves + profit % loss A/C - Preliminary Expenses

= Rs. 3,00,000 + Rs. 1,00,000 + Rs.50,000 + Rs. 65,000 - Rs. 15,000

= Rs. 5,00,000

Debt Equity Ratio = Debt / Equity

= Rs. 1,80,000 / Rs. 5,00,000 = 0.36: 1

Proprietary Ratio = Proprietary funds / Total Assets

= Rs. 5,00,000 / Rs. 8,00,000

= 0.625:1

Total Assets to Debt Ratio = Total Assets / Debt

= Rs. 8,00,000 / Rs. 1,80,000

= 4.44:1

EX.8 The debt equity ratio of X Ltd. is 1:2. Which of the following would increase / decrease or not change the debt equity ratio?

i) Issue of new equity shares
ii) Cash received from debtors
iii) Sale of fixed assets at a profit
iv) Redemption of debentures
v) Purchase of goods on credit.

Solution :

a) The ratio will decrease. This is because the debt remains the same, equity increases.

b) The ratio will not change. This is because neither the debt nor equality is affected.

c) The ratio will decrease. This is because the debt remains unchanged while equity increases by the amount of profit.

d) The ratio will decrease. This is because debt decreases while equity remains same.

e) The ratio will not change. This is because neither the debt nor equity is affected.

EX.9 From the following information, calculate stock turnover ratio.

Opening stock Rs 58,000; Excess of Closing stock opening stock Rs. 4,000; sales Rs. 6,40,000; Gross Profit @ 25 5 on cost

Solution :

Cost of goods Sold = Sales - Gross Loss

= Rs. 6,40,000 – 25/125(6,40,000)

= Rs. 5,12,000

Closing stock = Opening stock + Rs. 4000
= Rs. 58,000 + Rs 4,000
= Rs. 62,000

Average stock = (Opening stock + Closing Stock)/2
= (58,000 +62,000)/2
= Rs. 60,000

Stock Turnover Ratio = Cost of Goods Sold/ Average Stock
= Rs.5,12,000 / Rs. 60,000 = 8.53 times.

EX.10 A trader carries an average stock of Rs. 80,000. His stock turnover is 8 times. If he sells goods at profit of 20% on sales. Find out the profit.

Solution

Stock Turnover Ratio = Cost of Goods Sold/ Average Stock
= Cost of Goods Sold/Rs. 80,000

Cost of Goods Sold = Rs. 80,000 × 8
= Rs. 6,40,000

Sales = Cost of Goods Sold × 100/80
= Rs. 6,40,000 × 100/80
= Rs. 8,00,000

Gross Profit = Sales – Cost of Goods Sold
= Rs. 8,00,000 – Rs. 6,40,000
= Rs. 1,60,000.

EX.11 Calculate the Debtors Turnover Ratio and debt collection period (in months) from the following information:

Total sales = Rs. 2,00,000
Cash sales = Rs. 40,000
Debtors at the beginning of the year = Rs. 20,000
Debtors at the end of the year = Rs. 60,000

Solution

Average Debtors = (Rs. 20,000 + Rs. 60,000)/2 = Rs. 40,000

Net credit sales = Total sales - Cash sales
= Rs.2,00,000 - Rs.40,000
= Rs. 1,60,000

Debtors Turnover Ratio = Net Credit sales/Average Debtors
= Rs. 1,60,000/Rs. 40,000
= 4 Times.

Debt collection period = 12 months/52 weeks/365 days

Debtors' turnover

= 12/4

= 3 months

EX.12 Cash purchased ratio Rs. 1,00,000; cost of goods sold Rs. 3,00,000; opening stock Rs. 1,00,000 and closing stock Rs. 2,00,000. Creditors turnover ratio 3 times. Calculate the opening and closing creditors if the creditors at the end were 3 times more than the creditors at the beginning.

Solution

Total Purchase = Cost of goods sold + closing stock - opening stock

= Rs. 3,00,000 + Rs. 2,00,000 – Rs. 1,00,000

= Rs. 4,00,000

Credit purchases = Total Purchase - cash purchase

= Rs. 4,00,000- Rs. 1,00,000

= Rs. 3,00,000

Creditor Turnover Ratio = Net Credit Purchase / Average Creditor

Average Creditor = Rs. 3,00,000/ 3

= Rs. 1,00,000

(opening Creditor + Closing Creditor)/2 = Rs. 1,00,000

opening Creditor + Closing Creditor = Rs. 2,00,000

(opening Creditor + (opening Creditor + 3opening Creditor)

= Rs. 2,00,000

Opening Creditor = Rs. 40,000

Closing Creditor = Rs. 40,000 +(3 X Rs. 40,000)

= Rs. 1,60,000

EX.13 From the following information, calculate (i) Fixed Assets Turnover and (ii) Working Capital Turnover Ratios :

Preference Shares Capital	6,00,000	Plant and Machinery	6,00,000
Equity Share Capital	4,00,000	Land and Building	7,00,000
General Reserve	2,00,000	Motor Car	2,50,000
Profit and Loss Account	2,00,000	Furniture	50,000
15% Debentures	3,00,000	Stock	1,70,000
14% Loan	1,00,000	Debtors	1,20,000
Creditors	1,40,000	Bank	90,000
Bills Payable	30,000	Cash	20,000
Outstanding Expenses	30,000		
	20,00,000		**20,00,000**

Sales for the year were Rs. 60,00,000.

Solution

Sales = Rs 60,00,000

Fixed Assets = Rs. 6,00,000 + Rs.7,00,000 + Rs. 2,50,000 + Rs. 50,000

Working capital = Current Assets – Current Liabilities

Current Assets = Stock + Debtors + bank + cash

Rs. 1.70,000 + Rs. 1.20,000 + Rs. 90,000 + Rs. 20,000

Rs. 4,00,000

Current Liabilities = Creditors + BIP + OIS Exp
= Rs. 1,40,000 + Rs. 30,000 + Rs. 30,000
= Rs. 2,00,000

Working capital = Rs. 4,00,000 + Rs. 2,00,000
= Rs. 2,00,000

Fixed Turn over Ratio = Net sale / Fixed assets
= Rs. 60,00,000/ Rs. 16,00,000 = 3.75 times

Working capital Turnover = Net Sale / Working Capital
= Rs. 60,00,000/ Rs. 2,00,000 = 30 times.

EX.14 Calculate Gross Profit ratio from the following information:

Opening stock Rs. 50,000; closing stock Rs. 75,000; cash sale Rs. 1,00,000; credits sales Rs 1,70,000; Returns outwards Rs. 15,000; purchased Rs. 2,90,000; advertisement expenses Rs. 30,000; carriage inwards Rs.
10,000.

Solution :

Cost of goods sold = Opening stock + net purchases + direct expenses – closing stock

= Rs. 50,000 + (Rs. 2,90,000- Rs. 15,000) + Rs. 10,000 - Rs. 75,000

= Rs. 2,60,000

Total Sales = Cash Sales + Credits Sales

= Rs. 1,00,000 + Rs 1,70,000

= Rs. 2,70,000

Gross profit = Total Sales - Cost of goods sold

= Rs. 2,70,000- Rs. 2,60,000

= Rs. 10,000

Gross profit Ratio = 10,000 X 100

2,70,000

= 3.704 %