

RATIO ANALYSIS

Problem No. 1

From the following annual statements of Sudharshan Ltd. calculate the following ratio: (a) GP Ratio; (b) Operating Profit Ratio; (c) Net Profit Ratio; (d) Current Ratio; (e) Liquid Ratio; (f) Debt Equity Ratio; (g) Return on Investment Ratio; (h) Debtors Turnover Ratio; (i) Fixed Assets Turnover Ratio.

Trading and Profit and Loss Account for the year ended 31 st March, 2013			
Particulars	Amount	Particulars	Amount
To materials consumed:		By Sales	85000
Opening stock 9050		By profit on sale of investment	600
Purchases 54525		By interest on investment	300
Closing stock (14000)	49575		
To Carriage inwards	1425		
To office expenses	15000		
To sales expenses	3000		
To Financial expenses	1500		
To loss on sale of assets	400		
To net profit	15000		
Total	85900		85900

Balance Sheet as at 31 st March, 2013			
Liabilities	Amount	Assets	Amount
Share Capital : 2000 equity Shares of Rs. 10 each fully paid up	20000	Building	15000
Reserves	3000	Plant	8000
Profit & Loss Account	6000	Current Assets:	
Secured Loans	6000	Stock In Trade	14000
Bank overdraft	3000	Debtors	7000
Sundry creditors		Bills Receivable	1000
For expenses	2000	Bank Balances	3000
For others	8000		
Total	48000		48000

Answer

$$\text{Exp ratio} = \frac{\text{G.P}}{\text{Sales}}$$

$$\text{G.P} = 85,000 - 49,575 - 1,425 = 34,000$$

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$$= \frac{34,000}{85,000}$$

GPR = 40%

$$\text{Operating profit ratio} = \frac{\text{Operating (EBIT)}}{\text{Sales}}$$

O.P = 34,000 - 15,000 - 3,000

$$= \frac{16,000}{85,000}$$

OPR = 18.82%

$$\text{Net Profit Ratio} = \frac{\text{Net profit}}{\text{Sales}}$$

N.P = 15,000

$$= \frac{15,000}{85,000}$$

NPR = 17.65%

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} = \frac{25,000}{13,000}$$

CR = 1.92

$$\text{Liquid ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}} = \frac{11,000}{13,000}$$

QR = 0.85

$$\text{Debt Eq. ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{6,000}{29,000}$$

DE = 0.21

$$\text{Return on investment ratio} = \frac{\text{EBIT}}{\text{CE}} = \frac{16,000}{35,000}$$

ROI = 45.71%

$$\text{Debtor Turnover ratio} = \frac{\text{Net credit sales}}{\text{Avg Receivables}} = \frac{85,000}{8,000}$$

DTR = 10.625

$$\text{Fixed asset turnover ratio} = \frac{\text{Sales}}{\text{T.F.A}} = \frac{85,000}{23,000}$$

FATR = 3.69

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Problem No. 2

The Balance Sheet of Star Ltd. as at 31 st March, 2013 is given below:

Liabilities	Amount	Assets	Amount
Equity Shares Capital	6,00,000	Plant & Machinery	4,50,000
Reserves	1,80,000	Furniture	50,000
Creditors	1,20,000	Stock	1,80,000
		Debtors	1,20,000
		Cash at bank	1,00,00
Total	9,00,000	Total	9,00,000

The other details are as follows:

1. Total sales during the year have been Rs. 10,00,000 out of which cash sales amounted to Rs. 2,00,000.
2. The Gross Profit has been earned @ 20%
3. Amounts as on 1.4.2012
 Debtors Rs. 80,000
 Stock Rs. 1,40,000
 Creditors Rs. 30,000
4. Cash paid to creditors during the year Rs. 2,10,000.

You are required to calculate the following ratios:

[a] Debtors Turnover Ratio; [b] Creditors Turnover Ratio; [c] Stock Turnover Ratio.

Answer

$$\text{Debtor Turnover ratio} = \frac{\text{Net credit sales}}{\text{Avg Receivables}} = \frac{8,00,000}{1,00,000} = 8 \text{ times}$$

Creditors a/c

To Cash a/c (payments)	2,10,000	By bal b/d	30,000
To Balance c/d	1,20,000	By purchases	3,00,000
	3,30,000	(b/f)	3,30,000

$$\text{Creditors Turnover ratio} = \frac{\text{Net credit purchases}}{\text{Avg payable}} = \frac{3,00,000}{75,000} \text{ (2,70,000 + 30,000)}$$

CTR = 4 times

$$\text{Stock Turnover Ratio} = \frac{\text{COGS}}{\text{Avg Stock}} = \frac{8,00,000}{1,60,000} \text{ (10,00,000 - 20\%)}$$

STR = 5 times

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Problem No. 3

Following are the ratios relating to the trading activities of an organisation:

Debtors' Velocity	3 months
Stock Velocity	6 months
Creditors' Velocity	2 months
Gross Profit Ratio	20%

Gross Profit for the year ended 31st March, 2013 was Rs. 5,00,000. Stock as on 31st March, 2013 Rs. 20,000 more than it was on 1st April, 2012, Bills payable and Bills Receivable were Rs. 36,667 and Rs. 60,000 respectively.

You are to ascertain the figures of : [1] Sales [2] Debtors [3] Creditors; and [4] Stock

Answer

$$\text{Sales} = \frac{\text{G.P}}{\text{G.P}\%} = \frac{5,00,000}{20\%}$$

$$\text{Sales} = 25,00,000$$

$$\text{D.V} = \frac{12}{\text{DTR}}$$

$$3 = \frac{12}{\text{DTR}}$$

$$\text{DTR} = 4$$

$$\text{DTR} = \frac{\text{Net credit sales}}{\text{Avg Receivables}}$$

$$4 = \frac{25,00,000}{\text{Avg Receivables}}$$

$$\text{Avg Receivables} = 6,25,000$$

$$\begin{aligned} \text{Total receivables} &= \frac{12,50,000}{2} \\ &= 6,25,000 - 60,000 \\ &= 5,65,000 \end{aligned}$$

Creditors

$$\text{C.V} = \frac{12}{\text{CTR}}$$

$$2 = \frac{12}{\text{CTR}}$$

$$\text{CTR} = 6$$

$$\text{CTR} = \frac{\text{Net credit purchase}}{\text{Avg payables}}$$

$$6 = \frac{20,20,000}{\text{Avg payables}}$$

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Avg payables

$$= 3,36,667 - 36,667$$

$$= 3,00,000$$

O.S + purchase - C.S = COGS

$$9,90,000 + x - 10,10,000 = 20,00,000$$

$$x - 20,000 = 20,00,000$$

$$x = 20,20,000$$

$$\text{Creditors} = 3,00,000$$

Stock

$$S.V = \frac{12}{STR}$$

$$6 = \frac{12}{STR}$$

$$STR = 2$$

$$STR = \frac{COGS}{\text{Avg Inventory}}$$

$$2 = \frac{20,00,000}{\text{Avg inventory}}$$

$$\text{Avg inventory} = 10,00,000 * 2 = 20,00,000 \text{ Total inventory}$$

$$\text{Therefore, } (20,00,000 - 20,000)/2 = 9,90,000$$

$$\text{Closing stock} = 9,90,000 + 20,000 = 10,10,000$$

$$\text{opening stock} = 9,90,000$$

Problem No. 4

Using the following data, complete the Balance sheet of X Limited:

- Gross Profit Rs. 54,000
- Gross Profit ratio 20%
- Shareholders fund Rs. 6,00,000
- Credit sales to total sales 80%.
- Total asset turnover 0.3 time
- Inventory turnover 4 time
- Average collection period = 20 days, assume 360 days in a year
- Long term debt of equity 40%
- Current Ratio = 1.8

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Balance Sheet of X Ltd			
Liabilities	Rs.	Assets	Rs.
Sundry Creditors		Cash	
Long term debt		Sundry Debtors	
Shareholder fund		Inventory	
		Fixed assets	

Answer

Balance sheet of 'X' Ltd			
Sundry creditors (b/f)	60,000	Cash	42,000
Long term debt	2,40,000	Sundry debtors	12,000
Shareholders fund	6,00,000	Inventory	54,000
		Fixed assets	7,92,000
	9,00,000		9,00,000

$$\text{Sales} = \frac{54,000}{20\%} = 2,70,000 * 80\% = 2,16,000 \text{ credit sales}$$

$$\text{ATR} = \frac{\text{Sales}}{\text{T.A}} = 0.3 = \frac{2,70,000}{\text{T.A}} = 9,00,000$$

$$\text{ITR} = \frac{\text{COGS}}{\text{Avg Stock}} = 4 = \frac{2,16,000}{\text{Avg stock}}$$

Avg stock = 54,000

D.V = 20 days

$$\text{D.V} = \frac{360}{\text{DTR}}$$

$$\text{DTR} = \frac{360}{20} = 18 \text{ times}$$

$$18 \text{ times} = \frac{2,16,000}{\text{Avg debtors}}$$

Avg debtors = 12,000

Long term debt = 6,00,000 * 40% = 2,40,000

Total assets = 9 L So Total liabilities side = Rs. 9 L;

So Current liabilities = total liabilities side – long term debt – Sh. Funds

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$$= 9,00,000 - 2,40,000 - 6,00,000 = \text{Rs. } 60,000$$

$$\text{CR} = \frac{\text{C.A}}{\text{C.L}}$$

$$1.8 = \frac{\text{C.A}}{60,000}$$

$$\text{C.A} = 1,08,000$$

Problem No. 5

With the help of the following information complete the Balance sheet of MNOP Ltd.

Particulars	Amount
Equity Share Capital	100000
The relevant ratio of the company are as follows:	
Current Debt to Total debt	0.40
Total Debt to Owner Equity	0.60
Fixed assets to Owner Equity	0.60
Total assets turnover	2 times
Inventory turnover	8 times

Answer

Balance sheet

Equity share capital	1,00,000	F.A	60,000
Non - current debt	36,000	Other C.A	60,000
Current debt	24,000	Inventory	40,000
	1,60,000		1,60,000

$$\text{Fixed asset to owner's equity} = \frac{\text{Fixed asset}}{\text{Owners equity}}$$

$$0.6 = \frac{\text{Fixed asset}}{1,00,000}$$

$$\text{Fixed asset} = 60,000$$

$$\text{Total debt to Owners equity} = \frac{\text{Total debt}}{\text{Owners equity}}$$

$$0.6 = \frac{\text{Total debt}}{1,00,000}$$

$$\text{Total debt} = 60,000$$

$$\text{Current debt to total debt} = \frac{\text{Current debt}}{\text{Total debt}}$$

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$$0.4 = \frac{\text{Current debt}}{60,000}$$

Current debt = 24,000

$$\text{Total asset Turnover} = \frac{\text{Sales}}{\text{T.A}}$$

$$2 = \frac{\text{Sales}}{1,60,000}$$

Sales = 3,20,000

$$\text{Inventory turnover ratio} = \frac{\text{Sales}}{\text{Avg Inventory}}$$

$$8 = \frac{3,20,000}{\text{Avg Inventory}}$$

Avg Inventory = 40,000

Problem No. 6

From the following information, relating to a limited company, prepare Balance sheet:

1) Current Ratio	2
2) Liquid Ratio	1.5
3) Fixed Assets / Proprietary Fund	3 / 4
4) Working Capital	Rs. 75,000
5) Reserves and Surplus	Rs. 50,000
6) Bank Overdraft	Rs. 10,000

There were no long-term loans or fictitious assets.

Answer

Balance sheet

Equity share capital	2,50,000	F.A	2,25,000
R & S	50,000	Stock	52,500
BOD	10,000	Other CA	97,500
O.C.L	65,000		
	3,75,000		3,75,000

$$\text{CR} = \frac{\text{CA}}{\text{CL}} = \text{CA} - \text{CL} = \text{WC}$$

$$2 = \frac{\text{CA}}{\text{CL}} = 2\text{CL} - \text{CL} = 75,000$$

$$2 = \frac{\text{CA}}{\text{CL}} = 1,50,000$$

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75,000

$$QR = \frac{QA}{QL}$$

$$1.5 = \frac{QA}{65,000} = 97,500 \text{ QA}$$

$$\begin{aligned} \text{Stock} &= CA - QA \\ &= 1,50,000 - 97,500 \\ &= 52,500 \end{aligned}$$

$$\text{Fixed asset to Proprietary fund} = \frac{FA}{PF}$$

3/4th i.e., 0.75

$$\begin{aligned} PF &= ESC + R \ \& \ S = F.A \\ ESC + 50,000 &= 0.75 \end{aligned}$$

$$\begin{aligned} PF &= x \\ x + 75,000 &= 0.75x + 1,50,000 \\ 0.25x &= 75,000 \\ x &= 3,00,000 \\ F.A &= 3,00,000 * 0.75 = 2,25,000 \end{aligned}$$

Problem No.7

Based on the following information, prepare the Balance Sheet of Star Enterprises as at 31st December.

Current Ratio	- 2.5	COGS to Net Fixed Assets	- 2
Liquidity Ratio	- 1.5	Average Debt Collection Period	- 2.4 m
Net working capital	- Rs 6 lakhs	Fixed Assets to Net worth	- 0.80
Stock Turnover Ratio	- 5		
Long term Debt to Capital and Reserves- 7 /25;		Gross Profit to Sales - 20%	

Answer

Balance sheet			
Equity share capital	12,50,000	Net Fixed asset	10,00,000
R & S		Stock	4,00,000
Long term debt	3,50,000	Debtors	5,00,000
Current liabilities	4,00,000	Other CA	1,00,000
	20,00,000		20,00,000

$$CR = \frac{CA}{CL} = CA - CL = WC$$

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$$2.5 = \frac{CA}{CL} = 25.5 \text{ CL} = CA$$

$$2.5 \text{ CL} - \text{CL} = 6,00,000$$

$$1.5 \text{ CL} = 6,00,000$$

$$\text{CL} = 4,00,000$$

$$\text{CA} = 4,00,000 * 2.5$$

$$= 10,00,000$$

$$\text{QR} = \frac{\text{QA}}{\text{QL}}$$

$$1.5 = \frac{\text{QA}}{4,00,000}$$

$$\text{Q.A} = 6,00,000$$

$$\text{Stock} = \text{CA} - \text{QA}$$

$$10,00,000 - 6,00,000 = 4,00,000$$

$$\text{STR} = \frac{\text{COGS}}{\text{Avg stock}}$$

$$5 = \frac{\text{COGS}}{4,00,000}$$

$$\text{COGS} = 20,00,000$$

$$\text{COGS to NFA} = \frac{\text{COGS}}{\text{NFA}}$$

$$2 = \frac{20,00,000}{\text{NFA}}$$

$$\text{NFA} = 10,00,000$$

$$\text{D.C.P} = \frac{12}{\text{DTR}}$$

$$2.4 = \frac{12}{\text{DTR}}$$

$$\text{DTR} = 5$$

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$$\text{DTR} = \frac{\text{Net credit sales}}{\text{Avg receivables}}$$

Net credit sales

COGS = 20,00,000

G.P 20% on sales then 25% on cost

20,00,000 * 25% = 5,00,000

Total sales = 25,00,000

$$5 = \frac{25,00,000}{\text{Avg receivables}}$$

Avg receivables = 5,00,000

$$\frac{\text{FA}}{\text{NW}} = 0.8$$

$$0.8 = \frac{10,00,000}{\text{NW}}$$

NW = 12,50,000

Long term debt to Capital & Reserves = 7/25

$$\frac{7}{25} = \frac{\text{Long term debt}}{12,50,000}$$

Long term debt = 3,50,000

Problem No.8

From the following information relating to wise Ltd. prepare is summarized Balance Sheet.

Current Ratio	- 2.5	Sales / Debtors	- 6.0
Acid Test Ratio	- 1.5	Reserves / Capital Ratio	- 1.0
Gross Profit to Sales Ratio	- 0.2	Net worth / Long term Loan Ratio	- 20.0
Net Working capital to Net Worth Ratio	- 0.3;	Stock Velocity	- 2 months
Sales / Net Fixed Assets Ratio	- 2.0	Paid up Share Capital	- Rs. 10 Lakhs
Sales / Net Worth Ratio	- 1.5		

Answer

Balance sheet

Paid up capital	10,00,000	Net Fixed asset	15,00,000
R & S	10,00,000	Stock	4,00,000
Long term loan	1,00,000	Debtors	5,00,000
Current liabilities	4,00,000	Other CA	1,00,000

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25,00,000

25,00,000

$$\text{Reserves to capital} = \frac{\text{Reserves}}{\text{Capital}}$$

$$1 = \frac{\text{Reserves}}{10,00,000}$$

Reserves = 10,00,000

Networth = Share capital + R&S = 10 L + 10 L = 20 L

$$0.3 = \frac{\text{WC}}{\text{NW (20,00,000)}}$$

WC = 6,00,000

$$\text{CR} = \frac{\text{CA}}{\text{CL}}$$

$$2.5 = \frac{\text{CA}}{\text{CL}}$$

2.5CL - CL = 6,00,000 (WC)

0.5 CL = 6,00,000

CL = 4,00,000

$$2.5 = \frac{\text{CA}}{4,00,000}$$

CA = 10,00,000

$$\text{ATR} = \frac{\text{QA}}{\text{QL}}$$

$$1.5 = \frac{600}{\text{QL}}$$

QL = 4,00,000

$$\text{Sales to NW} = \frac{\text{Sales}}{\text{NW}}$$

$$1.5 = \frac{\text{Sales}}{20,00,000}$$

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sales = 30,00,000

$$\text{Sales to NFA} = \frac{\text{Sales}}{\text{NFA}}$$

$$2 = \frac{30,00,000}{\text{NFA}}$$

NFA = 15,00,000

$$\text{Sales to Debtor} = \frac{\text{Sales}}{\text{Debtor}}$$

$$6 = \frac{30,00,000}{\text{debtor}}$$

Debtor = 5,00,000

$$\text{Stock velocity} = \frac{12}{\text{STR}}$$

$$2 = \frac{12}{\text{STR}}$$

STR = 6

$$\text{STR} = \frac{\text{COGS}}{\text{Avg Receivables}}$$

$$6 = \frac{24,00,000}{\text{Avg Receivables}}$$

Avg Receivables = 4,00,000

$$20 = \frac{\text{NW}}{\text{LTL}}$$

$$20 = \frac{20,00,000}{\text{LTL}}$$

LTL = 1,00,000

Question No. 9

From the following information, prepare the balance sheet of XYZ Co. Ltd., showing the details of working :-

Particulars	Amount
Paid up capital	Rs. 50,000
Plant and Machinery	Rs. 1,25,000

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Total sales annual	Rs. 5,00,000
Gross Profit Margin	25%
Annual Credit Sales	80% net sales
Current ratio	2
Inventory turnover	4
Fixed assets turnover	2
Sales return	20% of sales
Average collection period	73 days
Bank credit to trade credit	2
Cash to inventory	1 : 15
Total debt to current liabilities	3

Answer

Balance sheet

Liabilities	Rs.	Assets	Rs.
Paid up capital	50,000	Net Fixed asset	2,00,000
R & S	78,000		
Debt	1,44,000		
Current liability		Debtors	64,000
Bank OD	48,000	Stock	75,000
Creditors	<u>24,000</u>	Cash	5,000
	72,000		
	3,44,000		3,44,000

Total sales	5,00,000
- sales return 20%	<u>1,00,000</u>
	4,00,000

Credit sales = 4,00,000 * 80%
= 3,20,000

Gross profit = 4,00,000 * 25% = 1,00,000
4,00,000 - 1,00,000 = 3,00,000

D.C.P = $\frac{360}{D.T.R}$

73 = $\frac{365}{D.T.R}$

D.T.R = 5

D.T.R = $\frac{\text{Net credit sales}}{\text{Net credit sales}}$

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Avg Receivables

$$5 = \frac{3,20,000}{\text{Avg Receivables}}$$

Avg. Receivables = 64,000

$$\text{I.T.R} = \frac{\text{COGS}}{\text{Avg stock}}$$

$$4 = \frac{3,00,000}{\text{Avg stock}}$$

Avg stock = 75,000

$$\text{Cash to inventory} = \frac{\text{Cash}}{\text{Inventory}}$$

$$\frac{1}{15} = \frac{\text{Cash}}{75000}$$

Cash = 5,000

$$\text{FA Tr} = \frac{\text{Sales}}{\text{NFA}}$$

$$2 = \frac{4,00,000}{\text{NFA}}$$

NFA = 2,00,000

$$\text{CR} = \frac{\text{CA}}{\text{CL}} = 2 = \frac{1,44,000}{\text{CL}}$$

CL = 72,000

$$\frac{\text{Bank OD}}{\text{Creditor}} = \frac{2}{1}$$

Total = 72,000
 $\left\{ \begin{array}{l} \frac{2}{3} \quad 48,000 \text{ (BOD)} \\ \frac{1}{3} \quad 24,000 \text{ (creditors)} \end{array} \right.$

$$\frac{\text{TD}}{\text{CL}} = 3$$

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$$3 = \frac{\text{TD}}{72,000}$$

$$\text{TD} = 2,16,000 - 72,000$$

$$\text{Debt} = 1,44,000$$

Question No. 10

The following accounting information and financial ratios of XYZ Ltd. relate to the year ended 31.03.2013:

i. Accounting Information:

Particulars	
Gross profit	15% of Sales
Net profit	8% of Sales
Raw Material consumed	20% of works cost
Direct wages	10% of works cost
Stock of raw material	3 months usage
Stock of finished goods	6% of works cost
Debt collection period	60 days

all sales are on credit

ii. Ratios:

Particulars	
Fixed assets to Sales	1 : 3
Fixed Assets to current assets	13: 11
Current Ratio	2
Long term loan to current liabilities	2 : 1
Capital to reserves and surplus	1 : 4

If value of fixed assets as on 31.03.2013 amounted to Rs. 26 lakhs, prepare a summarized profit & loss account of the company for the year ended 31.3.2013 and balance sheet as at 31.3.2013.

Answer

Trading & P & L			
To COGS	66,30,000	By Sales	78,00,000
To G.P	11,70,000		
	85,29,300		78,00,000
		By G.P	11,70,000
To Indirect exp	5,46,000		
To NP	6,24,000		
	11,70,000		11,70,000

Balance Sheet

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Share capital	3,00,000	Fixed assets	26,00,000
R & S	12,00,000		
		Current asset:	22,00,000
Long term loan	22,00,000	Stock = 7,29,300	
Current liability	11,00,000	Drs = 13,00,000	
		Cash (b/f) = 1,70,700	
	48,00,000		48,00,000

$$\frac{\text{F.A}}{\text{Sales}} = \frac{1}{3} = \frac{26,00,000}{\text{sales}} = \frac{1}{3}$$

Sales = 78,00,000

$$\frac{\text{F.A}}{\text{C.A}} = \frac{13}{11} = \frac{26,00,000}{\text{CA}} = \frac{13}{11}$$

CA = 22,00,000

$$\frac{\text{CA}}{\text{CL}} = \frac{2}{1} = \frac{22,00,000}{\text{CL}}$$

CL = 11,00,000

$$\frac{\text{Long term loan}}{\text{C.L}} = \frac{2}{1} = \frac{\text{LTL}}{11,00,000} = \frac{2}{1}$$

Long term loan = 22,00,000

G.P Margin = 78,00,000 * 15% = 11,70,000

N.P = 78,00,000 * 8% = 6,24,000

Works cost: Since, no bifurcation about O.H is given.

Works cost is same as COGS

Sales - GP = COGS

78,00,000 - 11,70,000 = 66,30,000

RM Consumed = 66,30,000 * 20% = 13,26,000

Direct wages = 66,30,000 * 10% = 6,63,000

Stock of finished goods = 66,30,000 * 6% = 3,97,800

Stock of RM = 3mths wages

13,26,000 * 3/12 = 3,31,500

Total stock = 7,29,300

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Debt collection period = 360/DTR

60 = 360/DTR

DTR = 6 times

$$\text{DTR} = \frac{\text{Cr sales}}{\text{Avg. Receivables}}$$

$$6 = \frac{78,00,000}{\text{Avg. Receivables}}$$

Avg. Receivables = 13,00,000

Total assets side = Total liabilities = Rs. 48,00,000

So net worth = Total liabilities side – LTL – Current liabilities

Net worth = 48,00,000 – 22,00,000 – 11,00,000 = 15,00,000

$$\frac{\text{Capital}}{\text{R \& S}} = \frac{1}{4}$$

Capital + R&S = 15,00,000

Therefore, capital = 15,00,000 * 1/5 = 3,00,000

Therefore, R & S = 15,00,000 * 4/5 = 12,00,000

Question No. 11

The following data relates to a company as at 31st March 2013 :

Particulars	Amount
Current ratio	1.75
Quick ratio	1.25
Stock turnover ratio (Closing Stock)	6 times
G. P. Ratio	20%
Reserve to Capital Ratio	0.6
Debtors collection period	2 months
Fixed assets turnover ratio (on cost of goods sold)	1.2
Capital gearing ratio	0.625
Fixed assets to net worth	1.25
Sales for the year	Rs. 15 lakh

You are required to prepare balance sheet as on 31st March, 2013.

Answer

Balance Sheet

ESC	5,00,000		FA		10,00,000
R & S	<u>3,00,000</u>	8,00,000	Current assets:		
Debt		5,00,000	Stock	2,00,000	
Current liability		4,00,000	Debtors	2,50,000	
			Cash	<u>2,50,000</u>	7,00,000

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17,00,000	17,00,000
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Sales	15,00,000				
- G.P (20%)	3,00,000				
COGS	12,00,000				

$$\text{FATR} = \frac{\text{COGS}}{\text{FA}} = \frac{12,00,000}{\text{FA}} = 1.23$$

$$\text{FA} = 10,00,000$$

$$\text{FA to NW} = \frac{\text{FA}}{\text{NW}} = 1.25 = \frac{10,00,000}{\text{NW}}$$

$$\text{NW} = 8,00,000$$

$$\text{STR} = \frac{\text{COGS}}{\text{Avg stock}} = 6 = \frac{12,00,000}{\text{Avg stock}}$$

$$\text{Avg stock} = 2,00,000$$

$$\text{CGR} = \frac{\text{PSC} + \text{Debt}}{\text{ESHF}} = 0.625 = \frac{\text{Debt}}{8,00,000}$$

$$\text{Debt} = 5,00,000$$

$$\text{D.C.P} = \frac{12}{\text{DTR}} = 2 = \frac{12}{\text{DTR}}$$

$$\text{DTR} = 6 \text{ times}$$

$$\text{DTR} = \frac{\text{Cr sales}}{\text{Avg. Receivables}} = 6 = \frac{15,00,000}{\text{Avg. Receivables}}$$

$$\text{Avg. Receivables} = 2,50,000$$

$$\text{Reserves to capital} = \frac{\text{Reserves}}{\text{Capital}}$$

$$0.6 = \frac{\text{Reserves}}{\text{Capital}}$$

$$\text{Suppose capital} = x$$

$$\text{R \& S} = 0.6x$$

$$\text{Total} = 1.6x \text{ \& } \text{NW} = 8,00,000$$

$$\text{Therefore, } 8,00,000 / 1.6 = 5,00,000 (x)$$

$$0.6x = 3,00,000 \text{ R \& S}$$

$$\text{CR} = \frac{\text{CA}}{\text{CL}} = 1.75$$

$$\text{QR} = \frac{\text{QA}}{\text{QA}} = 1.25$$

RATIO ANALYSIS

QL (CL)

$$\frac{CA - CL}{CL} = 0.5$$

$$\frac{\text{Stock}}{CL} = 0.5$$

$$\frac{2,00,000}{CL} = 0.5$$

$$CL = 4,00,000$$

$$1.75 = \frac{CA}{4,00,000}$$

$$CA = 7,00,000$$

$$1.25 = \frac{QA}{4,00,000}$$

$$QA = 5,00,000$$