

HW - Chapter 3 - Ratios - Q8

(i) Long term Debt

$$0.5 = \text{Long-term debt} \div \text{Net worth}$$

$$0.5 = \text{Long-term debt} \div (1,00,000 + 1,00,000)$$

$$\text{Long term debt} = \text{Rs. } 1,00,000$$

(ii) Total assets

$$\text{Total liabilities and Equity} = \text{Notes and payables} + \text{Long-term debt} + \text{Common stock} + \text{Retained earnings}$$

$$= \text{Rs. } 1,00,000 + \text{Rs. } 1,00,000 + \text{Rs. } 1,00,000 + \text{Rs. } 1,00,000 = \text{Rs. } 4,00,000$$

$$\text{Total assets} = \text{Total liabilities and Equity} = \text{Rs. } 4,00,000$$

(iii) Sales and Cost of Goods sold

$$\text{Total asset turnover} = 2.5 = \text{Sales} \div \text{Total Assets}$$

$$\text{Sales} = 2.5 \times 4,00,000 = \text{Rs. } 10,00,000$$

$$\text{Gross Margin} = 10\% \text{ of Sales}$$

$$\text{Cost of goods sold} = 90\% \text{ of Sales} = 90\% \text{ of } = \text{Rs. } 9,00,000.$$

(iv) Current Assets

$$\text{Inventory turnover} = 9 = \text{Cost of goods sold} \div \text{Inventory}$$

$$\text{Inventory} = \text{Rs. } 1,00,000$$

$$\text{Average collection period} = 18 = \text{Receivables} \times 360 \div \text{Sales}$$

$$\text{Accounts Receivable} = \text{Rs. } 50,000$$

$$\text{Acid-test ratio} = 1 = \text{Cash} + \text{Accounts Receivable} \div \text{Notes and Payables}$$

$$= \text{Cash} + 50,000 \div ,00,000$$

$$\text{Cash} = \text{Rs. } 50,000$$

(v) Plant and equipment

$$= \text{Total Assets} - \text{Current Assets}$$

$$= \text{Rs. } 4,00,000 - (\text{Rs. } 1,00,000 + \text{Rs. } 50,000 + \text{Rs. } 50,000) = \text{Rs. } 2,00,000$$

Balance Sheet

	Rs.		Rs.
Cash	50,000	Notes and payables	1,00,000
Accounts receivable	50,000	Long-term debt	1,00,000
Inventory	1,00,000	Common stock	1,00,000
Plant and equipment	2,00,000	Retained earnings	1,00,000
Total assets	4,00,000	Total liabilities and equity	4,00,000