

# Chapter 1

## Financial Analysis & Planning - Ratio Analysis

### **TYPES OF RATIO**

#### **I. PROFITABILITY RATIOS BASED ON SALES:**

These ratios measure how efficiently a company has generated profit on sales and investment.

i. **Gross Profit Ratio** =  $\frac{\text{Gross Profit}}{\text{Net Sales}}$  (In %)

Gross Profit = Gross Profit as per Trading Account.

Sales = Sales net of returns.

**Significance** = Indicator of Basic Profitability.

ii. **Operating Profit Ratio** =  $\frac{\text{Operating Profit}}{\text{Net Sales}}$  (In %)

Operating Profit = Sales Less Cost of Sales

[OR]

Net Profit as per P & L Account

(+) Non-Operating Expenses (e.g. Loss on sale of assets, preliminary Expenses written off, etc.)

(-) Non-Operating Income (e.g. Rent, Interest & Dividends received)

Sales = Sales net of returns.

**Significance** = Indicator of Operating Performance of business.

iii. **Net Profit Ratio** =  $\frac{\text{Net Profit}}{\text{Net Sales}}$  (In %)

Net Profit = Net profit as per P & L A/c (either before tax or after tax, depending upon data).

Sales = Sales net of returns.

**Significance** = Indicator of Overall Profitability.

iv. **Contribution Sales Ratio [or] Profit Volume Ratio** = Contribution/ Sales

Contribution = Sales Less Variable Costs.

Sales = Sales net of returns.

**Significance** = Indicator of Profitability in Marginal Costing.

#### **II. COVERAGE RATIOS:**

The soundness of firm, from the view point of long term creditors & Preference shares, lays its ability to service their client.

i. **Debt Service Coverage Ratio** =  $\frac{\text{Earnings for Debt Service}}{(\text{Interest} + \text{Instalment})}$  (In Times)

Earnings for Debt Service = Net Profit after Taxation

(+) Interest on Debt Funds

(+) Non-Cash Operating Expenses (e.g. depreciation & amortizations)

(+) Non-Operating Items/Adjustments (e.g. Loss on sale of Fixed Assets, etc.)

Interest + Instalment = Interest + Principal, i.e.

Interest on Debt

(+) Instalment of Loan Principal

**Significance** = Indicates extent of current earnings available for meeting commitments of interest and instalment. Ideal Ratio must be between 2 to 3 times.

ii. **Interest Coverage Ratio** =  $\frac{\text{EBIT}}{\text{Interest}}$  (In Times)

EBIT = Earnings before Interest and Tax.

Interest = Interest on Debt

**Significance** = Indicates ability to meet interest obligations of the current year. Should be greater than 1.

$$\text{iii. Preference Dividend Coverage Ratio} = \frac{\text{EAT}}{\text{Preference Dividend}} \text{ (In Times)}$$

EAT = Earnings after Tax.

Preference Dividend = Dividend on Preference Capital.

**Significance** = Indicates ability to pay dividend on Preference Capital. Should be greater than 1.

### III. TURNOVER/ACTIVITY/PERFORMANCE RATIOS

These ratio show how efficiently a company is using its assets to generate sales, e.g. Fixed Assets Turnover ratio, Debtor Turnover ratio etc.

$$\text{i. Raw Material Turnover Ratio} = \frac{\text{Cost of Raw Material Consumed}}{\text{Average Stock of Raw Material}} \text{ (In Times)}$$

Cost of Raw Material Consumed = Opening Stock of Raw Materials  
 (+) Purchases of Raw Materials  
 (-) Closing Stock of Raw Materials

$$\text{Average Stock of Raw Material} = \frac{(\text{Opening RM Stock} + \text{Closing RM Stock})}{2}$$

**Significance** = Indicates how fast/regularly Raw Materials are used in production.

$$\text{ii. WIP Turnover Ratio} = \frac{\text{Factory cost}}{\text{Average Stock of WIP}} \text{ (In Times)}$$

Factory Cost = Materials Consumed + Wages + POH

$$\text{Average Stock of WIP} = \frac{(\text{Opening WIP} + \text{Closing WIP})}{2}$$

**Significance** = Indicates the WIP movement/production cycle.

$$\text{iii. Finished Goods or Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock of Finished Goods}} \text{ (In Times)}$$

Cost of Goods Sold = (a) For Manufacturers: Opening Stock of FG (+) Cost of Production (-) Closing Stock of FG.

(b) For Traders: Opening Stock of FG + Cost of Goods Purchased (-) Closing Stock of FG.

$$\text{Average Stock of Finished Goods} = \frac{(\text{Opening FG Stock} + \text{Closing FG Stock})}{2}$$

**Significance** = Indicates how fast inventory is used/sold. High Turnover shows fast moving FG. Low Turnover may mean dead or excessive stock.

$$\text{iv. Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Account Receivable}} \text{ (In Times)}$$

Credit Sales = Credit Sales net of returns

Average Accounts Receivable = Average Accounts Receivable (i.e. Debtors + B/R)

$$\frac{(\text{Opening Drs \& B/R} + \text{Closing Drs \& B/R})}{2}$$

**Significance** = Indicates the speed of collection of Credit Sales/Debtors.

$$\text{v. Creditors Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Average Accounts Payable}} \text{ (In Times)}$$

Credit Purchases = Credit Purchases net of returns

Average Accounts Payable = Average Accounts Payable (i.e. Creditors + B/P)

$$\frac{(\text{Opening Crs \& B/P} + \text{Closing Crs \& B/P})}{2}$$

$$\text{vi. Working Capital Turnover Ratio} = \frac{\text{Turnover (Net Sales)}}{\text{Net Working Capital}} \text{ (In Times)}$$

[Also called Operating Turnover (or) Cash Turnover Ratio]

Turnover = Sales net of returns

Net Working Capital = Current Assets Less: Current Liabilities

**(Average of Opening and Closing balances may be taken)**

**Significance**= Ability to generate sales per rupee of Working Capital.

$$\text{vii. Fixed Assets Turnover Ratio} = \frac{\text{Turnover}}{\text{Net Fixed Assets}} \text{ (In Times)}$$

Turnover = Sales net of returns

Net Fixed Assets = Net Fixed Assets (**Average of Opening and Closing balances may be taken**)

**Significance**= Ability to generate sales per rupee of Fixed Assets.

$$\text{viii. Capital Turnover Ratio} = \frac{\text{Turnover}}{\text{Capital Employed}} \text{ (In Times)}$$

Turnover = Sales net of returns

Capital Employed = (**Average of Opening and Closing balances may be taken**)

**Significance** = Ability to generate sales per rupee of long-term Investment.

### **ALSO STUDY CONCEPT OF DEBTOR, CREDITORS & STOCK VELOCITY**

#### **IV. CAPITAL STRUCTURE RATIOS**

These ratios measure the extent to which a company which has been financed by long term debt obligations like Debt equity ratio. It measures the ability of an enterprise to survive over a long period of time.

$$\text{i. Debt to Total Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}}$$

Debt = Borrowed Funds (or) Loan Funds

= Debentures + Long-Term Loans from Banks, Financial Institutions, etc.

$$\text{ii. Debt Ratio} = \frac{\text{Total Debt}}{\text{Net Assets}}$$

Total debt includes both long term and short term debt.

$$\text{iii. Equity to Total Funds Ratio} = \frac{\text{Equity}}{\text{Total Funds}}$$

Equity = Net Worth (or) Shareholders' Funds (or) Proprietors' Funds (or) Owners' Funds (or) Own Funds  
= Equity Share Capital + Preference Share Capital + Reserves & Surplus Less: Miscellaneous Expenditure (as per Balance Sheet) and Accumulated Losses.

Total Funds = Long Term Funds (or) Capital Employed (or) Investment

= Debt + Equity.....Liability Route

= Fixed Assets + Net Working Capital .....Assets Route

**Significance** = Indicates Long Term Solvency, mode of financing and extent of own funds used in operations.

Ideal Ratio is 33%.

$$\text{iv. Equity Ratio} = \frac{\text{Shareholders Equity}}{\text{Net Assets}}$$

$$\text{v. Debt - Equity Ratio} = \frac{\text{Total Debt}}{\text{Equity}} \text{ OR } \frac{\text{Long term Debt}}{\text{Equity}}$$

Long term Debt = Borrowed Funds (or) Loan Funds = Debentures + Long-Term Loans from Banks, Financial Institutions, etc.

Equity = Net Worth (or) Shareholders' Funds (or) Proprietors' Funds (or) Owners' Funds (or) Own Funds

= Equity Share Capital + Preference Share Capital + Reserves & Surplus Less: Miscellaneous Expenditure (as per Balance Sheet) and Accumulated Losses.

**Significance**= Indicates the relationship between Debt & Equity. Ideal Ratio is 2:1.

$$\text{vi. Capital Gearing Ratio} = \frac{\text{Preference Capital + Debentures + other borrowed funds}}{\text{Equity Shareholders Funds}}$$

Preference Capital + Debentures + Other borrowed funds = Preference Share Capital and Debt i.e. Debentures + Long-Term Loans from Banks, Financial Institutions, etc.

Equity Shareholders Funds = Equity Share Capital Less Preference Share Capital i.e.  
 = Equity Share Capital + Reserves & Surplus Less: Miscellaneous Expenditure (as per Balance Sheet) and Accumulated Losses.

**Significance** = Show proportion of Fixed Charge (Dividend or Interest) Bearing Capital to Equity Funds, and the extent of advantage or leverage enjoyed by Equity Shareholders.

$$\text{vii. **Proprietary Ratio** = } \frac{\text{Proprietary Funds}}{\text{Total Assets}}$$

Proprietary Funds = Net Worth (or) Shareholders' Funds (or) Proprietors' Funds (or) Owners' Funds (or) Own Funds

= Equity Share Capital + Preference Share Capital + Reserves & Surplus Less: Miscellaneous Expenditure (as per Balance Sheet) and Accumulated Losses.

Total Assets = Net Tangible Fixed Assets (+) Total Current Assets

**Significance** = Shows extent of Owner's Funds, i.e. Shareholders' Funds utilised in financing the assets of the business.

$$\text{viii. **Fixed Asset to Long Term Fund Ratio** = } \frac{\text{Fixed Assets}}{\text{Long Term Funds}}$$

Fixed Assets = Net Fixed Assets, i.e. Gross Block (-) Depreciation

Long Term Funds = Debt + Equity.....Liability Route

= Fixed Assets + Net Working Capital .....Assets Route

**Significance** = Shows proportion of Fixed Assets (Long-Term Assets) financed by long-term funds. Indicates the financing approach followed by the Firm, i.e. Conservative, Matching or Aggressive. Ideal Ratio is less than one.

## V. LIQUIDITY RATIO

These ratios show company's ability to meet its short term financial obligation like current ratio and quick ratio.

$$\text{i. **Current Ratio** = } \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets = Inventories/Stocks

- (+) Debtors & B/R
- (+) Cash & Bank
- (+) Receivables
- (+) Accruals
- (+) Short Term Loans
- (+) Marketable Investments/Short Term Securities

Current Liabilities = Sundry Creditors

- (+) Outstanding Expenses
- (+) Short Term Loans & Advances (Cr.)
- (+) Bank Overdraft/Cash Credit
- (+) Provision for Taxation
- (+) Proposed Dividend
- (+) Unclaimed Dividend

**Significance** = Ability to repay short-term liabilities promptly. Ideal Ratio is 2:1. Very high Ratio indicates existence of idle Current Assets.

$$\text{ii. Quick Ratio = Quick Assets / Current Liabilities}$$

(Also called Liquid Ratio [or] Acid Test Ratio)

Quick Assets = Current Assets

- (-) Inventories
- (-) Prepaid Expense

**Significance** = Ability to meet immediate liabilities. Ideal Ratio is 1:1

$$\text{iii. **Absolute Cash Ratio [or] Cash Ratio [or] Absolute Liquidity Ratio** = } \frac{\text{Cash + Marketable Securities}}{\text{Current Liabilities}}$$

Cash + Marketable Securities = Cash in Hand  
 (+) Cash at Bank (Dr)  
 (+) Marketable Investments/Short Term Securities(current investments)

**Significance** = Availability of cash to meet short-term commitments. No ideal ratio as such. If Ratio > 1, it indicates very liquid resources, which are low in profitability.

iv. **Basic Defence Interval Measure** =  $\frac{\text{Quick Assets}}{\text{Cash Expenses per day}}$  (In days)

Quick Assets = Current Assets  
 (-) Inventories  
 (-) Prepaid Expenses

Cash Expenses per Day =  $\frac{\text{Annual Cash Expenses}}{365}$

Cash Operating Expenses = COGS + Selling admin other expenses (excluding depreciation and non cash exp)

Cash Expenses = Total Expenses (-) Depreciation & write-offs.

**Significance** = Ability to meet regular Cash Expenses.

## VI. OVERALL RETURN RATIOS - OWNER VIEW POINT

i. **Return on Investment (ROI) [or] Return on Capital Employed (ROCE) =**

Pre-tax ROCE: =  $\frac{\text{EBIT}}{\text{Capital Employed}}$

Post-tax ROCE: =  $\frac{\text{EBIT}(1-t)}{\text{Capital Employed}} = \frac{\text{Eat} + \text{Interest}}{\text{Capital Employed}}$

- Either pre-tax or post-tax ROCE may be computed.
- Pre-tax ROCE is generally preferred for analysis purposes.
- Capital Employed = Investment

= Equity + Debt

**Significance** = Overall profitability of the business of the business on the Total Funds Employed.

ii. **Return on Net Worth (RONW) =**

Pre-tax RONW: =

Post – tax RONW: =

- Either pre-tax or post-tax ROE may be computed.
- Post-tax ROE is generally preferred for analysis purposes.
- Equity (or) Net Worth (or) Shareholders' Funds (or) Proprietors' Funds (or) Owners' Funds (or) Own Funds

**Significance** = Indicates profitability of Equity Funds/Owner's Funds invested in the business.

iii. **Return on Assets (ROA) =**

Pre-tax ROA: =  $\frac{\text{EBT}}{\text{Average Total Assets}}$

Post-tax ROA: =  $\frac{\text{EAT} + \text{Interest}}{\text{Average Total Assets}}$  or  $\frac{\text{EBT}(1-T)}{\text{Average Total Assets}}$

- Either pre-tax or post-tax ROA may be computed.
- Pre-tax ROA is generally preferred for analysis purposes.
- Average, i.e. ½ of Opening & Closing Balances of any of the following items –
- (a) Total Assets, (or)
- (b) Tangible Assets, (or)
- (c) Fixed Assets.

**Significance** = Indicates Net Income per rupee of Average Total Assets or Tangible or Fixed Assets.

iv. **Earnings per Share (EPS)** =  $\frac{\text{Residual Earnings}}{\text{Number of Equity Shares}}$

Residual Earnings, i.e. EAT (-) Preference Dividend

$$\text{Number of Equity Shares outstanding} = \frac{\text{Equity Capital}}{\text{Face Value per Share}}$$

**Significance** = Income per share, whether or not distributed as dividends.

$$\text{v. Dividend per share (DPS)} = \frac{\text{Total Equity Dividend}}{\text{Number of Equity Shares}}$$

Profits distributed to Equity Shareholders.

**Significance** = Profits distributed per Equity Share.

$$\text{vi. Price Earnings Ratio (PE Ratio)} = \frac{\text{Market Price per Share}}{\text{Earnings per share}}$$

Average Market price (or closing Market price) as per Stock Exchange quotations. (Market price per share = MPS)

**Significance** = Indicates relationship between MPS and EPS, and Shareholders' perception of the Company.

$$\text{vii. Dividend Yield (\%)} = \frac{\text{Dividend}}{\text{Market price per share}}$$

Average MPS (or Closing MPS) as per stock Exchange quotations.

**Significance** = True return on Investment, based on Market Value on Market Value of Shares.

$$\text{viii. Book Value per Share} = \frac{\text{ESHF}}{\text{Number of Equity Shares}}$$

$$\text{Number of Equity Shares outstanding} = \frac{\text{Equity Capital}}{\text{Face value per share}}$$

**Significance** = Basis of Valuation of Shares based on Book Values.

$$\text{ix. Market Value to Book Value} = \frac{\text{Market Price per Share}}{\text{Book Value per Share}}$$

Average MPS (or Closing MPS) as per stock Exchange quotations.

**Significance** = Higher ratio indicates better position for Shareholders in terms of return & capital gains.

$$\text{X. Q Ratio} = \frac{\text{Market Value of equity and liabilities}}{\text{Estimated replacement cost of assets}} \text{ OR } \frac{\text{Market Value of Company}}{\text{Asset Replacement Cost}}$$

## PRACTICAL PROBLEMS

### Question 1 - Rtp

FM Ltd. is in a competitive market where every company offers credit. To maintain the competition, FM Ltd. sold all its goods on credit and simultaneously received the goods on credit. The company provides the following information relating to current financial year:

Debtors Velocity	3 months
Creditors Velocity	2 months
Stock Turnover Ratio (on Cost of Goods Sold)	1.5
Fixed Assets turnover Ratio (on Cost of Goods Sold)	4
Gross Profit Ratio	25%
Bills Receivables	₹ 75,000
Bills Payables	₹ 30,000
Gross Profit	₹ 12,00,000

FM Ltd. has the tendency of maintaining extra stock of ₹ 30,000 at the end of the period than that at the beginning.

DETERMINE:

- (i) Sales and cost of goods sold
- (ii) Sundry Debtors
- (iii) Closing Stock
- (iv) Sundry Creditors
- (v) Fixed Assets

**Question 2 - Pyq**

Following are the data in respect of ABC Industries for the year ended 31<sup>st</sup> March, 2021:

Debt to Total assets ratio	: 0.40
Long-term debts to equity ratio	: 30%
Gross profit margin on sales	: 20%
Accounts receivable period	: 36 days
Quick ratio	: 0.9
Inventory holding period	: 55 days
Cost of goods sold	: ₹ 64,00,000

Liabilities	₹	Assets	₹
Equity Share Capital	20,00,000	Fixed assets	
Reserves & Surplus		Inventories	
Long-term debts		Accounts receivables	
Accounts payable		Cash	
Total	50,00,000	Total	

Required:

Complete the Balance Sheet of ABC Industries as on 31<sup>st</sup> March, 2021. All calculations should be in nearest Rupee. Assume 360 days in a year.

**Question 3 - Pyq**

From the information given below calculated the amount of Fixed assets and Proprietor's Funds

Ratio of fixed assets to Proprietors Funds	0.75
Net working capital	₹ 6,00,000

**Question 4 - Pyq**

JKL Limited has the following Balance Sheets as on March 31, 2006 and March 31, 2005:

**Balance Sheet(₹ in Lakhs)**

Particulars	March 31, 2006	March 31, 2005
Sources of Funds		
Shareholders' funds	2,377	1,472
Loan Funds	3,570	3,083
	5,947	4,555
Application of Funds		
Fixed Assets	3,466	2,900
Cash and Bank	489	470
Debtors	1,495	1,168
Stock	2,867	2,407
Other Current Assets	1,567	1,404
Less: Current Liabilities	(3,937)	(3,794)
	5,947	4,555

The Income Statement of the JKL Ltd. for the year ended is as follows:

(₹ in lakhs)

Particulars	March 31, 2006	March 31, 2005
Sales	22,165	13,882
Less: Cost of Goods sold	20,860	12,544
Gross Profit	1,305	1,338
Less: Selling, General and Administrative expenses	1,135	752
Earnings before Interest and Tax (EBIT)	170	586
Interest Expense	113	105
Profit before tax	57	481
Tax	23	192
Profit after tax (PAT)	34	289

Required:

- Calculate for the year 2005-06:
  - Inventory Turnover Ratio
  - Financial Leverage

- c. Return on Investment (ROI)  
 d. Return on Equity (ROE)  
 e. Average Collection Period.  
 (ii) Give a brief comment on the financial position of JKL Limited.

**Question 5 - Rtp**

You are required to calculate the Total Current Assets of Ananya Limited from the given information:

Stock Turnover 5 times		Current liabilities	₹ 2,40,000
Sales (All credit)	₹ 7,20,000	Liquidity Ratio	1.25
Gross Profit Ratio 25%		Stock at the end is ₹ 30,000 more than stock in the beginning	

**Question 6 - Pyq**

MN Limited gives you the following information related for the year ending 31<sup>st</sup> March, 2009:

- Current Ratio 2.5 : 1
- Debt – Equity Ratio 1: 1.5
- Return on Total Assets 15%
- Total Assets Turnover Ratio 2
- Gross Profit Ratio 20%
- Stock Turnover Ratio 7
- Current Market Price per Equity Share ₹ 16
- Net Working Capital ₹ 4,50,000
- Fixed Assets ₹ 10,00,000
- 60,000 Equity Shares of ₹ 10 each
- 20,000, 9% Preference shares of ₹ 10 each
- Opening Stock ₹ 3,80,000

You are required to calculate:

- Quick Ratio
- Fixed assets Turnover Ratio
- Proprietary Ratio
- Earnings per share
- Price Earnings Ratio.

**Question 7 - Mtp**

Jensen and spencer pharmaceutical is in the business of manufacturing pharmaceutical drugs including the newly invented Covid vaccine. Due to increase in demand of Covid vaccines, the production had increased at all time high level and the company urgently needs a loan to meet the cash and investment requirements. It had already submitted a detailed loan proposal and project report to Expo-Impo bank, along with the financial statements of previous three years as follows:

**Statement of Profit and Loss** (in '000)

	2018-19	2019-20	2020-21
Sales			
Cash	400	960	1,600
Credit	3,600	8,640	14,400
Total Sales	4,000	9,600	16,000
Cost of goods sold	2,480	5,664	9,600
Gross profit	1,520	3,936	6,400
Operating Expenses			
General, administration, and selling expenses	160	900	2,000
Depreciation	200	800	1,320
Interest expenses (on borrowings)	120	316	680
Profit before tax (PBT)	1,040	1,920	2,400
Tax@ 30%	312	576	720
Profit after tax (PAT)	728	1,344	1,680

**Balance Sheet** (In '000)

	2018-19	2019-20	2020-21
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Assets			
Non-Current Assets			
Fixed Assets (net of depreciation)	3,800	5,000	9,400
Current Assets			
Cash and Cash equivalents	80	200	212
Accounts receivable	600	3,000	4,200
Inventories	640	3,000	4,500
Total	5,120	11,200	18,312
Equity & Liabilities			
Equity Share capital (shares of ₹ 10 each)	2,400	3,200	4,000
Other Equity	728	2,072	3,752
Non-Current borrowings	1,472	2,472	5,000
Current Liabilities	520	3,456	5,560
Total	5,120	11,200	18,312

**Industry Average of Key ratios**

Ratio	Sector Average
Current ratio	2.30:1
Acid test ratio (quick ratio)	1.20:1
Receivable Turnover ratio	7 times
Inventory turnover ratio	4.85 times
Long-term debt to total debt	24%
Debt-to-equity ratio	35%
Net profit ratio	18%
Return on total assets	10%
Interest coverage ratio (times interest earned)	10

As a loan officer of Expo-Impo Bank, you are required to appraise the loan proposal on the basis of comparison with industry average of key ratios considering balance for accounts receivable of ₹ 6,00,000 and inventories of ₹ 6,40,000 respectively as on 31<sup>st</sup> March, 2018.

**Question 8 -**

FLOW Ltd. has the following Profit & Loss Account for the year ended 31<sup>st</sup> March, 2010 and the Balance Sheet as on that date:

**Profit and Loss Account (For the year ended 31<sup>st</sup> March, 2010) (₹ In lakhs)**

Particulars	Amount	Particulars	Amount
Opening Stock	1.75	Sales: Credit	12.00
Add: Manufacturing Cost	10.75	Cash	3.00
Less: Closing Stock	(1.50)		
Cost of Goods Sold	11.00		
Gross Profit	4.00		
	15.00		15.00
Administrative expenses	0.35	Gross Profits	4.00
Selling expenses	0.25	Royalty Income	0.09
Depreciation	0.50		
Interest	0.47		
Income-Tax	1.26		
Net Profit	1.26		
	4.09		4.09

**Balance Sheet as on 31<sup>st</sup> March, 2010**

Liabilities	₹	Assets	₹
Equity Shares of ₹ 10	3.50	Plant and Machinery	10.00
10% Preference Shares	2.00	Less: Depreciation	2.50
Reserves and Surplus	2.00	Net Plant and Machinery	7.50
Long-term loan (12%)	1.00	Goodwill	1.40
Debentures (14%)	2.50	Stock	1.50
Creditors	0.60	Debtors	1.00
Bills Payable	0.20	Prepaid expenses	0.25

Accrued expenses	0.20	Marketable securities	0.75
Provision for Tax	0.65	Cash	0.25
	12.65		12.65

The market price per share of FLOW Ltd. on 31<sup>st</sup> March, 2010 is ₹ 45.

Particulars	(₹ in lakhs)
Reserves at the beginning	1.465
Net Profit during the year	1.260
	2.725
Preference Dividends	0.200
Equity Dividends	0.525
Reserves at the close of the year	2.000

Compute the following Ratios.

(1) Current Ratio; (2) Quick Ratio; (3) Debt Equity Ratio; (4) Interest coverage; (5) Fixed charge coverage; (6) Stock Turnover; (7) Debtors Turnover; (8) Average collection period; (9) Gross Profit Margin; (10) Net Profit Margin; (11) Operating Ratio; (12) Return on Capital Employed; (13) Earnings per share; (14) Return on shareholder's funds; (15) P/E Ratio; and (16) Earning Yield.

### Question 9 -

Excellence Ltd. has the following data for projections for the next five years. It has an existing Term Loan of ₹ 360 lakhs repayable over next five years and has got sanctions for new term loan for ₹ 500 lakhs which is also repayable in five years. As a Finance Manager you are required to calculate:

- (i) Interest Service coverage ratio and  
(ii) Debt Service Coverage Ratio

Particulars	Amount(₹ in Lakhs)
Profit after tax	480
Depreciation	155
Taxation	125
Interest on Term Loans	162
Repayment of Term Loans	178

### Question 10 - Study Material

In a meeting held at Solan towards the end of 2009, the Directors of M/s HPCL Ltd. has taken a decision to diversify. At present HPCL Ltd. sells all finished goods from its own warehouse. The company issued debentures on 01.01.2010 and purchased fixed assets on the same day. The purchase prices have remained stable during the concerned period. Following information is provided to you:

#### INCOME STATEMENTS

Particulars		2009 (₹)		2010 (₹)
Cash Sales	30,000		32,000	
Credit Sales	2,70,000	3,00,000	3,42,000	3,74,000
Less: Cost of goods sold		2,36,000		2,98,000
Gross profit		64,000		76,000
Less: Expenses				
Warehousing	13,000		14,000	
Transport	6,000		10,000	
Administrative	19,000		19,000	
Selling	11,000		14,000	
Interest on Debentures		49,000		57,000
Net Profit		15,000		19,000

#### BALANCE SHEET

Particulars		2009 (₹)		2010 (₹)
Fixed Assets (Net Block)	-	30,000	-	40,000
Debtors	50,000		82,000	
Cash at Bank	10,000		7,000	
Stock	60,000		94,000	
Total Current Assets (CA)	1,20,000		1,83,000	

Creditors	50,000		76,000	
Total Current Liabilities (CL)	50,000		76,000	
Working Capital (CA – CL)		70,000		1,07,000
Total Assets		1,00,000		1,47,000
Represented by:				
Share Capital		75,000		75,000
Reserve and Surplus		25,000		42,000
Debentures		-		30,000
		1,00,000		1,47,000

You are required to calculate the following ratios for the years 2009 and 2010.

- Gross Profit Ratio
- Operating Expenses to Sales Ratio
- Operating Profit Ratio
- Capital Turnover Ratio
- Stock Turnover Ratio
- Net Profit to Net Worth Ratio, and
- Debtors Collection Period.

Ratio relating to capital employed should be based on the capital at the end of the year. Give the reasons for change in the ratios for 2 years. Assume opening stock of ₹ 40,000 for the year 2009. Ignore Taxation.

#### Question 11 -

Compute Average collection Period from the following details by adopting a 360 days year (a) Average Inventory – ₹ 3,60,000, (b) Debtors – ₹ 2,40,000 (c) Inventory Turnover – 6 Times (d) GP Ratio – 10% (e) Credit Sales to Total Sales – 80%.

#### Question 12 - Study Material

The total sales (all credit) of a firm are ₹ 6,40,000. It has a gross profit margin of 15 per cent and a current ratio of 2.5. The firm's current liabilities are ₹ 96,000; inventories ₹ 48,000; cash ₹ 16,000.

- Determine the average inventory to be carried by the firm, if an inventory of 5 times is expected? (Assume a 360 day year).
- Determine the average collection period if the opening balance of debtors is intended to be of ₹ 80,000? (Assume a 360 day year).

#### Question 13 - Study Material

VRA Limited has provided the following information for the year ending 31<sup>st</sup> March 2015

Debt Equity Ratio	2:1
14% long term debt	₹ 5,00,000
Gross Profit Ratio	30%
Return on equity	50%
Income Tax Rate	35%
Capital Turnover Ratio	1.2 times
Opening Stock	₹ 4,50,000
Closing stock	8% of sales

You are required to prepare Trading and Profit and Loss Account for the year ending 31<sup>st</sup> March, 2015.

#### Question 14 - Mtp

The following figures and ratios are related to a company:

(i) Sales of the year (all credit)	₹ 30,00,000
(ii) Gross Profit ratio	25 percent
(iii) Fixed assets turnover (based on cost of goods sold)	1.5
(iv) Stock turnover (based on cost of goods sold)	6
(v) Liquid ratio	1:1
(vi) Current ratio	1.5:1
(vii) Receivable (Debtors) collection period	2 months
(viii) Reserves and surplus to Share capital	0.6:1
(ix) Capital gearing ratio	0.5
(x) Fixed assets to net worth	1.20:1

You are required to prepare:

- (a) Balance Sheet of the company on the basis of above details.  
 (b) The statement showing working capital requirement, if the company wants to make a provision for contingencies @ 10 percent of net working capital including such provision.

**Question 15 - Study Material**

Additional information: Equity shares 80,000 @ 10 each ₹ 8,00,000 & 9% Preference shares of ₹ 3,00,000, Profit (after tax at 35 per cent), ₹ 2,70,000; Depreciation, ₹ 60,000; Equity dividend paid, 20 percent; Market price of equity shares, ₹ 40.

You are required to compute the following, showing the necessary workings:

- (a) Dividend Yield on the Equity Shares  
 (b) Cover for the Preference and Equity Dividends  
 (c) Earnings per Share  
 (d) Price-earnings Ratio.

**Question 16 -**

Following are the ratios to the trading activities of Put Ltd.

Debtors Velocity – 3 months.	Gross Profit -20%, Gross Profit for the year just ended was ₹ 5 lakhs.
Stock Velocity – 6 month	Stock at the end of the year was ₹ 2,00,000 more than it was at the beginning
Creditors Velocity – 2 months.	Bills Payable & Receivable were ₹ 36,667 & ₹ 60,000 respectively.

From the above, compute the figures of – (a) Sales, (b) Sundry Debtors, (c) Sundry Creditors, & (d) Stock.

**Question 17 - Pyq**

Following information relates to a firm:

Current ratio	1.5 : 1
Inventory Turnover Ratio (Based on COGS)	8
Sales	₹ 40,00,000
Working capital	₹ 2,85,000
Gross Profit Ratio	20%

You are required to find out:

- (i) The value of the opening stock presuming that the closing stock is ₹ 40,000 more than the opening stock.  
 (ii) The value of Bank overdraft, presuming that the Bank overdraft and other current liabilities are in a ratio of 2 : 1

**Question 18 - Pyq**

From the following information, prepare a summarised Balance sheet as at 31<sup>st</sup> March 2002:

Working Capital	₹ 2,40,000
Bank overdraft	₹ 40,000
Fixed Assets to Proprietary Ratio	0.75
Reserves and Surplus	₹ 1,60,000
Current ratio	2.5
Liquid Ratio	1.5

**Question 19 -**

From the following particulars prepare the Balance Sheet of Total Ltd as on 31-3-2010:-

Net profit	5% of turnover
Fixed Assets	₹ 6 lacs
G.P.	25%
Capital gearing	1:1
Current Ratio	2
Reserve	2/3 of net profits
Working Capital	₹ 4 lakhs
Creditors velocity	2 months
Fixed Assets to turnover	4
Stock velocity	2 months
Debtors velocity	1.5 months

**Question 20 -**

Quick Ltd. provides the following information:

Sales	₹ 16,00,000
Current Ratio	2.9 times
Average collection period	64 days
Total Liabilities to Net worth	75%
Sales to net worth	2.3 times
Sales to closing inventory	4.5 times
Current Liabilities to Net worth	42%

You are required to prepare its summarized Balance sheet

**Question 21 - Study Material**

Ganpati Limited has furnished the following ratios and information relating to the year ended 31<sup>st</sup> March, 2010.

Sales	₹ 60,00,000
Return on Net Worth	25%
Rate of Income Tax	50%
Share Capital to Reserves	7:3
Current Ratio	2
Net Profit to Sales	6.25%
Inventory Turnover (based on Cost of goods sold)	12
Cost of goods sold	₹ 18,00,000
Interest on Debentures	₹ 60,000
Sundry Debtors	₹ 2,00,000
Sundry Creditors	₹ 2,00,000

You are required to:

(a) Calculate the operating expenses for the year ended 31<sup>st</sup> March, 2010.

(b) Prepare a balance sheet as on 31<sup>st</sup> March in the following format:

**Balance Sheet as on 31<sup>st</sup> March, 2010**

Liabilities	₹	Assets	₹
Share Capital	-	Fixed Assets	-
Reserve and Surplus	-	Current Assets	-
15% Debentures	-	Stock	-
Sundry Creditors	-	Debtors	-
		Cash	-

**Question 22 -**

Using the following Data, complete the balance sheet given below:

Gross Profit	₹ 54,000
Shareholders' Funds	₹ 6,00,000
Gross Profit Margin	20%
Credit sales to total sales	80%
Total assets turnover	0.3 times
Inventory turnover	4 times
Average collection period (a 360 days year)	20 days
Current ratio	1.8
Long term debt of Equity	40%

**Balance Sheet**

Liabilities	₹	Assets	₹
Creditors	.....	Cash	.....
Long term Debt	.....	Debtors	.....
Shareholders' funds	.....	Inventory	.....
		Fixed Assets	.....

**Question 23 -**

Below is given the balance Sheet of A Ltd. as on 31<sup>st</sup> March,2001 –

Liabilities	₹	Assets	₹
Share Capital:		Fixed Assets:	
14% Preference Shares	1,00,000	At Cost	5,00,000
Equity Shares	2,00,000	Less: Depreciation	1,60,000
General Reserves	40,000	Stock in trade	60,000
12% Debentures	60,000	Sundry Debtors	80,000
Current Liabilities	1,00,000	Cash	20,000
<b>Total</b>	<b>5,00,000</b>	<b>Total</b>	<b>5,00,000</b>

The following information is available. Prepare the forecast Balance Sheet as on 31<sup>st</sup> March 2002.

- Fixed assets costing ₹ 1,00,000 to be installed on 1<sup>st</sup> April 2001 & would become operative on that date, payment is required to be made on 31<sup>st</sup> March 2002.
- The Fixed Assets-Turnover Ratio would be 1.5 (on the basis of cost of Fixed Assets).
- The Stock-Turnover Ratio would be 14.4 (on the basis of the opening & closing stock).
- The break-up of cost and Profit would be as follows: Materials – 40%, Labour – 25%, Manufacturing Expenses – 10%, Office and Selling Expenses – 10% , Depreciation – 5%, Profit – 10% and Sales – 100% .The Profit is subject to interest & taxation at 50%.
- Debtors would be 1/9<sup>th</sup> of Sales which Creditors would be 1/5<sup>th</sup> of Materials Cost.
- A Dividend at 10% would be paid on Equity Shares in March 2002.
- ₹ 50,000, 12% Debentures were issued on 1<sup>st</sup> April 2001.

**Question 24 - Pyq**

Using the following, complete the balance sheet given below:

- |  |         |
|--|---------|
| 1. Total debt to net worth   | 1 : 2   |
| 2. Total assets turnover   | 2       |
| 3. Gross profit on sales   | 30%     |
| 4. Average collection period (assume 360 days in a year)                       | 40 days |
| 5. Inventory turnover ratio based on cost of goods sold and year-end inventory | 3       |
| 6. Acid test ratio   | 0.75    |

**Balance Sheet as on March 31, 2007**

Liabilities	₹	Assets	₹
Equity Shares capital	4,00,000	Plant and Machinery and other fixed assets	.....
Reserves and Surplus	6,00,000	Current assets:	
Total Debt:		Inventory	.....
Current liabilities	.....	Debtors	.....
		Cash	.....

**Question 25 - Pyq**

With the help of the following information complete the Balance Sheet of MNOP LTD:

Equity share capital	₹ 1,00,000
The relevant ratios of the company are as follows:	
Current debt to total debt	0.40
Total debt to owner's equity	0.60
Fixed assets to owner's equity	0.60
Total assets turnover	2 Times
Inventory turnover	8 Times

**Question 26 - Study Material**

Using the following information, complete this balance sheet:

Long-term debt to net worth	0.5 to 1
Total asset turnover	2.5 times
Average collection period*	18 days
Inventory turnover	9 times
Gross profit margin	10%
Acid-test ratio	1 to 1

\*Assume a 360-day year and all sales on credit.

Liabilities	₹	Assets	₹
Notes and payables	1,00,000	Cash	-
Long-term debt	-	Accounts receivable	-
Common stock	1,00,000	Inventory	-
Retained earnings	1,00,000	Plant and equipment	-
Total liabilities and equity	-	Total assets	-

### Question 27 -

From the following particulars prepare the Balance Sheet of Krishna Ltd.

Current Ratio	2
Working Capital	₹ 2,00,000
Capital Block to Current Assets	3:2
Fixed Assets to Turnover	1:3
Sales Cash/Credit	1:2
Creditors Velocity	2 months
Stock Velocity	2 months
Debtors Velocity	3 months
Capital Block:	
Net profit –	10% of turnover
Reserve –	2 1/2% of turnover
Debenture/Share Capital –	1:2
Gross Profit Ratio –	25% (of sales)

### Question 28 - Pyq

The following figures and ratios are related to a company:

Sales for the year (all credit)	₹ 30,00,000	Current Ratio	1.5:1
Gross Profit Ratio	25%	Debtors Collection Period	2 months
Fixed assets Turnover (basis on Cost of Goods Sold)	1.5	Reserves & Surplus to Share Capital	0.6:1
Stock Turnover (basis on Cost of Goods Sold)	6	Capital Gearing Ratio	0.5
Liquid Ratio	1:1	Fixed Assets to Net Worth	1.20:1

You are required to prepare:

- Balance Sheet of the company on the basis of above details.
- Statement showing Working Capital Requirements, if the company wants to make a provision for contingencies at 10% of Net Working Capital including such provision.

### Question 29 - Study Material

Following is the abridged Balance Sheet of Alpha Ltd.:-

Liabilities	₹	Assets	₹	₹
Share Capital	1,00,000	Land and Buildings		80,000
Profit and Loss Account	17,000	Plant and Machineries	50,000	
Current Liabilities	40,000	Less: Depreciation	15,000	35,000
				1,15,000
		Stock	21,000	
		Debtors	20,000	
		Bank	1,000	42,000
Total	1,57,000	Total		1,57,000

With the help of the additional information furnished below, you are required to prepare Trading and Profit & Loss Account and a Balance Sheet as at 31<sup>st</sup> March, 2010:

(i) The company went in for reorganization of capital structure, with share capital remaining the same as follows:

Share capital	50%
Other Shareholders' funds	15%

5% Debentures	10%
Trade Creditors	25%

Debentures were issued on 1<sup>st</sup> April, interest being paid annually on 31<sup>st</sup> March.

(ii) Land and Buildings remained unchanged. Additional plant and machinery has been bought and a further ₹ 5,000 depreciation written off. (The total fixed assets then constituted 60% of total fixed and current assets.)

(iii) Working capital ratio was 8:5.

(iv) Quick assets ratio was 1:1.

(v) The debtors (four-fifth of the quick assets) to sales ratio revealed a credit period of 2 months. There were no cash sales.

(vi) Return on net worth was 10%.

(vii) Gross profit was at the rate of 15% of selling price.

(viii) Stock turnover was eight times for the year. Ignore Taxation.

### Question 30 -

From the following information and ratios, prepare the Profit and Loss Account and Balance Sheet of M/s Check & Co. an export company. [Take 1 year = 360 days] (Ignore taxation).

Book value per share	₹ 40.00	Stock Turnover Ratio	5.00
Variable cost	60%	Total liabilities to Net worth	2.75
Average collection Period	30 Days	Long term Loan interest	12%
Financial Leverage (i.e. EBIT/EBT)	2.20	Net profit to sales	10%
Earnings per share (each of ₹ 10)	₹ 10.00	Current Ratio	3.00
Current Assets to stock	3:2	Net working capital	₹ 10 Lakhs
Acid test ratio	1.00	Fixed assets Turnover Ratio	1.20

### Question 31 -

Rate of gross profit 25%; Net profit to Equity Capital 10%; Stock turnover ratio – 5 times; Average debt collection period – 2 months; Creditors velocity – 3 months; Current ratio – 2; Proprietary ratio (fixed assets to capital employed) 80%; capital gearing ratio (Preference Shares and Debentures to Capital Employed) 30%; General reserve and profit and loss to issued equity capital 25%; Preference share capital to debentures 2. Cost of sales consists of 40% for materials and balance for wages and overheads. Gross profit is ₹ 3,00,000. Prepare the projected Trading and Profit and Loss A/c for the next financial year ending 31<sup>st</sup> December, 2010 and the projected Balance Sheet as on that date:

### Question 32 - Study Material

XYZ Company's details are as under:

Revenue: ₹ 29,261; Net Income: ₹ 4,212; Assets: ₹ 27,987; Shareholders' Equity: ₹ 13,572. Calculate return on equity.

### Question 33 -

Particulars	Amount (₹)
Return	80,000
Sales	3,00,000
Capital Employed	2,25,000

Compute (a) Capital Turnover Ratio, (b) Net Operating Profit ratio and (c) Applying Du Pont analysis state the relationship between the two.

### Question 34 -

Compute the Return on Capital Employed from the following data relating to company A and B applying Du Pont analysis:-

Particulars	Ram Ltd	Shyam Ltd
Gross Profit Margin	30%	₹ 1,80,000 (15%)
Capital Employed	Nil	₹ 2,00,000
Turnover on Capital Employed	4 Times	Nil
Net Sales for the year	₹ 10,00,000	Nil
Operating Profit on Sales	5%	6%

### Question 35 -

Masco Ltd. has furnished the following ratios and information relating to the year ended 31st March 2021 :

Sales	Rs 75,00,000
Return on net worth	25%
Rate of income tax	50%
Share capital to reserves	6:4
Current ratio	2.5
Net profit to sales ( After Income tax)	6.50%
Inventory turnover ( based on cost of goods sold)	12
Cost of goods sold	Rs 22,50,000
Interest on debentures	Rs 75,000
Receivables (includes debtors Rs 1,25,000)	Rs 2,00,000
Payables	Rs 2,50,000
Bank overdraft	Rs 1,50,000

You are required to :

a) Calculate the operating expenses for the year ended 31st March, 2021.

b) Prepare a balance sheet as on 31st March in the following format :

Liabilities	Rs	Assets	Rs
Share capital		Fixed Assets	
Reserves & Surplus		Current Assets	
15% Debentures		Stock	
Payables		Receivables	
Bank Term Loan		Cash	

### Question 36 -

The profit margin of a company is 10% and the capital turnover is 3 times. What is the return on investment (ROI) of the company? Applying du Pont analysis, state by what percentage the company's return on investment increase will or decrease if –

- The profit margin decreases by 2%?
- The profit margin increases by 2%?
- The capital turnover decreases by 1?
- The capital turnover increases by 1?

### Question 37 - Pyq

Balance sheet of ABC Ltd. is as follows :

Balance sheet as on 31-03-2020

Liabilities	Amount (Rs)	Assets	Amount (Rs)
Share capital	2,00,000	Land & buildings	40,000
Reserves & surplus	30,000	Plant & machinery	
current liabilities	20,000	1,00,000	70,000
		Less : Depreciation	55,000
		30,000	45,000
		Stock	40,000
		Debtors	
		Cash & bank	
	2,50,000		2,50,000

Following additional information is also provided for the year 2020-21 :

(i) The company has decided for re – organization of its total liabilities, ( with the amount of share capital remaining the same) as follows :

As % of total liabilities

Share capital	40%
Reserves	20%
10% debentures	15%
Trade creditors	25%

Debentures will be issued on 1st April ; interest will be paid annually on 31st March.

(ii) Land & Buildings remained unchanged. Additional plant and machinery has been introduced and further Rs 10,000 depreciation is to be written off on additions . ( Total fixed assets then constituted 30% of total assets)

(iii) Quick ratio is 1:1.

(iv) The debtor (One fourth of the quick assets ) to sales ratio represents a credit period of 1.5 months . There are no cash sales .

(v) Return of net worth is 15%.

(vi) Gross Profit is at the rate of 40% of selling price.

You are required to prepare:

(i) Projected profit & loss account for the year ended March, 2021 and

(ii) Balance sheet as on 31st March, 2021. (Ignore Corporate Tax)

### Question 38 - Rtp

Given below are the estimations for the next year by Niti Ltd.:

Particulars	(₹ in crores)
Fixed Assets	5.20
Current Liabilities	4.68
Current Assets	7.80
Sales	23.00
EBIT	2.30

The company will issue equity funds of ₹ 5 crores in the next year. It is also considering the debt alternatives of ₹ 3.32 crores for financing the assets. The company wants to adopt one of the policies given below:

(₹ in crores)

Financing Policy	Short term debt @ 12%	Long term debt @ 16%	Total
Conservative	1.08	2.24	3.32
Moderate	2.00	1.32	3.32
Aggressive	3.00	0.32	3.32

Assuming corporate tax rate at 30%, CALCULATE the following for each of the financing policy:

(i) Return on total assets

(ii) Return on owner's equity

(iii) Net Working capital

(iv) Current Ratio

Also advise which Financing policy should be adopted if the company wants high returns.

### Question 39 - Study Material

The following accounting information and financial ratios of PQR Ltd. relate to the year ended 31<sup>st</sup> March, 2020

I	Accounting Information :	
	Gross profit	15% of Sales
	Net profit	8% of Sales
	Raw materials consumed	20% of works cost
	Direct wages	10% of work cost
	Stock of Raw materials	3 months usage
	Stock of finished goods	6% of works cost
	Debt collection period	60 days
	All sales are on credit	
II	Financial Ratios :	
	Fixed assets to Sales	1:3
	Fixed assets to Current assets	13 : 11
	Current Ratio	2:1
	Long – term loans to Current liabilities	2:1
	Capital to Reserves and Surplus	1:4

If the value of Fixed Assets as on 31<sup>st</sup> March , 2019 amounted to ₹ 26 lakhs , Prepare a summarised Profit and Loss Account of the company for the year ended 31<sup>st</sup> March , 2020 and also the Balance Sheet as on 31<sup>st</sup> March, 2020.

### Question 40 - Study Material

ABC Company sells plumbing fixtures on the terms of 2/10 , net 30. Its financial statements over the last 3 years are as follows :

Particulars	2018	2019	2020
	₹	₹	₹
Cash	30,000	20,000	5,000

Accounts Receivable	2,00,000	2,60,000	2,90,000
Inventory	4,00,000	4,80,000	6,00,000
Net fixed assets	8,00,000	8,00,000	8,00,000
	14,30,000	15,60,000	16,95,000
	₹	₹	₹
Accounts payable	2,30,000	3,00,000	3,80,000
Accruals	2,00,000	2,10,000	2,25,000
Bank loan , short - term	1,00,000	1,00,000	1,40,000
Long - term debts	3,00,000	3,00,000	3,00,000
Common stock	1,00,000	1,00,000	1,00,000
Retained earnings	5,00,000	5,50,000	5,50,000
	14,30,000	15,60,000	16,95,000
	₹	₹	₹
Sales	40,00,000	43,00,000	38,00,000
Cost of goods sold	32,00,000	36,00,000	33,00,000
Net profit	3,00,000	2,00,000	1,00,000

Analyse the company's financial condition and performance over the last 3 years. Are there any problems ?

#### Question 41 - Study Material

Following information are available for Navya Ltd. along with various ratio relevant to the particular industry it belongs to. Appraise your comments on strength and weakness of Navya Ltd. comparing its ratios with the given industry norms .

Balance sheet as at 31.3.2020

Liabilities	Amount (₹)	Assets	Amount (₹)
Equity share capital	48,00,000	Fixed Assets	24,20,000
10% Debentures	9,20,000	Cash	8,80,000
Sundry Creditors	6,60,000	Sundry Debtors	11,00,000
Bills payable	8,80,000	Stock	33,00,000
Other current liabilities	4,40,000		-
Total	77,00,000	Total	77,00,000

#### Statement of Profitability

For the year ending 31.03.2020

Particulars	Amount (₹)	Amount (₹)
Sales		1,10,00,000
Less : Cost of goods sold :	-	-
Material	41,80,000	-
Wages	26,40,000	-
Factory Overhead	12,98,000	81,18,000
Gross profit	-	28,82,000
Less : Selling and Distribution Cost	11,00,000	-
Administrative Cost	12,28,000	23,28,000
Earnings before Interest & Taxes	-	5,54,000
Less : Interest Charges	-	92,000
Earnings before tax	-	4,62,000
Less : Taxes & 50%	-	2,31,000
Net Profit (PAT)		2,31,000

#### Industry Norms

Ratios	Norm
Current Ratio	2.5
Receivable Turnover Ratio	8.0
Inventory Turnover Ratio (based on Sales)	9.0

Total assets Turnover Ratio	2.0
Net Profit Ratio	3.5%
Return on Total assets	7.0%
Return on Net Worth (Based on Net profit )	10.5%
Total Debt / Total Assets	60.0%

**Question 42 - Pyp**

Following information and ratios are given for W Limited for the year ended 31st March, 2022:

Equity Share Capital of ₹ 10 each	₹ 10 lakhs
Reserves & Surplus to Shareholders' Fund	0.50
Sales / Shareholders' Fund	1.50
Current Ratio	2.50
Debtors Turnover Ratio	6.00
Stock Velocity	2 Months
Gross Profit Ratio	20%
Net Working Capital Turnover Ratio	2.50

You are required to Calculate:

1. Shareholders' Fund
2. Stock
3. Debtors
4. Current liabilities
5. Cash Balance.

**Question 43 - Rtp**

The following information of ASD Ltd. relate to the year ended 31st March, 2022:

Net profit	8% of sales
Raw materials consumed	20% of Cost of Goods Sold
Direct wages	10% of Cost of Goods Sold
Stock of raw materials	3 months' usage
Stock of finished goods	6% of Cost of Goods Sold
Gross Profit	15% of Sales
Debt collection period	2 Months (All sales are on credit)
Current ratio	2 : 1
Fixed assets to Current assets	13 : 11
Fixed assets to sales	1 : 3
Long-term loans to Current liabilities	2 : 1
Capital to Reserves and Surplus	1 : 4

You are required to PREPARE-

Profit & Loss Statement of ASD Limited for the year ended 31st March, 2022 in the following format.

Particulars	(₹)	Particulars	(₹)
To Direct Materials consumed	?	By Sales	?
To Direct Wages	?		
To Works (Overhead)	?		
To Gross Profit c/d	?		
	?		?
To Selling and Distribution Expenses	?	By Gross Profit b/d	?
To Net Profit	?		
	?		?

Balance Sheet as on 31st March, 2022 in the following format.

Liabilities	(₹)	Assets	(₹)
Share Capital	?	Fixed Assets	1,30,00,000
Reserves and Surplus	?	Current Assets:	
Long term loans	?	Stock of Raw Material	?
Current liabilities	?	Stock of Finished Goods	?
		Debtors	?
		Cash	?
	?		?

**Question 44 - Rtp**

From the following information, find out missing figures and REWRITE the balance sheet of Mukesh Enterprise.

Current Ratio = 2:1

Acid Test ratio = 3:2

Reserves and surplus = 20% of equity share capital

Long term debt = 45% of net worth

Stock turnover velocity = 1.5 months

Receivables turnover velocity = 2 months

You may assume closing Receivables as average Receivables.

Gross profit ratio = 20%

Sales is ₹ 21,00,000 (25% sales are on cash basis and balance on credit basis)

Closing stock is ₹ 40,000 more than opening stock.

Accumulated depreciation is 1/6 of the original cost of fixed assets.

Balance sheet of the company is as follows:

Liabilities	(₹)	Assets	(₹)
Equity Share Capital	?	Fixed Assets (Cost)	?
Reserves & Surplus	?	Less: Accumulated. Depreciation	?
Long Term Loans	6,75,000	Fixed Assets (WDV)	?
Bank Overdraft	60,000	Stock	?
Creditors	?	Debtors	?
		Cash	?
Total	?	Total	?

**Question 45 - Mtp**

From the following information and ratios, PREPARE the Balance sheet as at 31st March 2022 and Income statement for the year ended on that date for M/s Ganguly & Co -

Average Stock	₹10 lakh
Current Ratio	3:1
Acid Test Ratio	1:1
PBIT to PBT	2.2:1
Average Collection period (Assume 360 days in a year)	30 days
Stock Turnover Ratio (Use sales as turnover)	5 times
Fixed assets turnover ratio	0.8 times
Working Capital	₹10 lakh
Net profit Ratio	10%
Gross profit Ratio	40%
Operating expenses (excluding interest)	₹ 9 lakh
Long term loan interest	12%
Tax	Nil

**Question 46 - Rtp**

From the following table of financial ratios of Prabhu Chemicals Limited, comment on various ratios given at the end:

Ratios	2021	2022	Average of Chemical Industry
Liquidity Ratios			
Current ratio	2.1	2.3	2.4
Quick ratio	1.4	1.8	1.4
Receivable turnover ratio	8	9	8
Inventory turnover	8	9	5
Receivables collection period	46 days	41 days	46 days
Operating profitability			
Operating income –ROI	24%	21%	18%
Operating profit margin	18%	18%	12%
Financing decisions			
Debt ratio	45%	44%	60%
Return			

Return on equity	26%	28%	18%
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COMMENT on the following aspect of Prabhu Chemicals Limited

1. Liquidity
2. Operating profits
3. Financing
4. Return to the shareholders.

#### Question 47 - Study Material

From the following information, you are required to PREPARE a summarised Balance Sheet for Rudra Ltd. for the year ended 31st March, 2023:

Debt Equity Ratio	1:1
Current Ratio	3:1
Acid Test Ratio	8:3
Fixed Asset Turnover (on the basis of sales)	4
Stock Turnover (on the basis of sales)	6
Cash in hand	₹ 5,00,000
Stock to Debtor	1:1
Sales to Net Worth	4
Capital to Reserve	1:2
Gross Profit	20% of Cost
COGS to Creditor	10:1

Interest for entire year is yet to be paid on Long Term loan @ 10%.