UNIT- III
PREPARATION AND INTERPRETATION OF FINANCIAL STATEMENTS

FINANCIAL STATEMENTS

Accounting standards require statements that show the financial position, earnings, cash flows, and investment (distribution) by (to) owners.These measurements are reported, respectively, by the following statements: balance sheet, income statement, statement of cash flows, and statement of changes in equity. These statements can be constructed in a variety of different ways and levels of detail. An important consideration is that the financial framework of the firm should complement the physical performance measures of the firm.

A typical indicator used as a measure of the firm's financial health is its cash position. Cash flows are an important, but often misleading, indicators of the financial health of a firm. Two necessary conditions for long-term survival in any firm are profitability and feasibility.

1. Profitability is defined as the difference between a firm's revenues and its expenses.
2. Feasibility is the solvency or short-term ability of the firm to meet its obligations when they become due.

If a firm is not both profitable and feasible over time, it cannot survive. In the short run, a firm can be feasible but not profitable. For a limited time, the firm can generate cash flows to remain solvent by borrowing, refinancing existing debt, selling inventory, liquidating capital assets, increasing accounts payable, or depleting its capital base.

Unfortunately, these techniques are only temporary solutions and don't substitute for long-run profitability. Focusing on only the firm's "cash position" can, and has, led to devastating results for firms. An appropriately constructed set of financial statements will allow a firm to monitor both profitability and solvency and diagnose any difficulties the firm has in these areas.

NATURE OF FINANCIAL STATEMENTS

The chronologically recorded facts about events expressed in monetary terms for a defined period of time are the basis for the preparation of periodical financial statements which reveal the financial position as on a date and the financial results obtained during a period. The American Institute of Certified Public Accountants states the nature of financial statements as, "the statements prepared for the purpose of presenting a periodical review of report on progress by the management and deal with the status of investment in the business and the results achieved during the period under review. They reflect a combination of recorded facts, accounting principles and personal judgements".

The following points explain the nature of financial statements:

1. Recorded facts
2. Accounting conventions
3. Postulates
4. Personal judgements

1. **Recorded Facts:**

Financial statements are prepared on the basis of facts in the form of cost data recorded in accounting books. The original cost or historical cost is the basis of recording transactions. The figures of various accounts such as cash in hand, cash at bank, trade receivables, fixed assets, etc., are taken as per the figures recorded in the accounting books. The assets purchased at different times and at different prices are put together and shown at costs. As these are not based on market prices, the financial statements do not show current financial condition of the concern.

2. **Accounting Conventions:**

Certain accounting conventions are followed while preparing financial statements. The convention of valuing inventory at cost or market price, whichever is lower, is followed. The valuing of assets at cost less depreciation principle for balance sheet purposes is followed. The convention of materiality is followed in dealing with small items like pencils, pens, postage stamps, etc. These items are treated as expenditure in the year in which they are purchased even though they are assets in nature. The stationery is valued at cost and not on the principle of cost or market price, whichever is less. The use of accounting conventions makes financial statements comparable, simple and realistic.

3. **Postulates:**

Financial statements are prepared on certain basic assumptions (pre-requisites) known as postulates such as going concern postulate, money measurement postulate, realisation postulate, etc. Going concern postulate assumes that the enterprise is treated as a going concern and exists for a longer period of time. So, the assets are shown on historical cost basis. Money measurement postulate assumes that the value of money will remain the same in different periods. Though there is drastic change in purchasing power of money, the assets purchased at different times will be shown at the Financial Statements of a Company amount paid for them. While, preparing statement of profit and loss the revenue is included in the sales of the year in which the sale was undertaken even though the sale price may be received over a number of years. The assumption is known as realisation postulate.

4. **Personal Judgements:**

Under more than one circumstance, facts and figures presented through financial statements are based on personal opinion, estimates and judgements. The depreciation is provided taking into consideration the useful economic life of fixed assets. Provisions for doubtful debts are made on estimates and personal judgements. In valuing inventory, cost or market value, whichever is less is being followed. While deciding either cost of inventory or market value of inventory, many personal judgements are to be made based on certain considerations. Personal opinion, judgements and estimates are made while preparing the financial statements to avoid any possibility of over statement of assets and liabilities, income and expenditure, keeping in mind the convention of conservatism. Thus, financial statements are the summarised reports of recorded facts and are prepared the following accounting concepts, conventions and requirements of Law.

OBJECTIVES OF FINANCIAL STATEMENTS

Financial statements are the basic sources of information to the shareholders and other external parties for understanding the profitability and financial position of any business concern. They provide information about the results of the business concern during a specified period of time in terms of assets and liabilities, which provide the basis for taking decisions. Thus, the primary objective of financial statements is to assist the users in their decision-making.

The specific objectives include the following:

1. **To provide information about economic resources and obligations of a business:** They are prepared to provide adequate, reliable and periodical information about economic resources and obligations of a business firm to investors and other external parties who have limited authority, ability or resources to obtain information.
2. **To provide information about the earning capacity of the business:** They are to provide useful financial information which can gainfully be utilised to predict, compare and evaluate the business firm's earning capacity.
3. **To provide information about cash flows:** They are to provide information useful to investors and creditors for predicting, comparing and evaluating, potential cash flows in terms of amount, timing and related uncertainties.
4. **To judge effectiveness of management:** They supply information useful for judging management's ability to utilise the resources of a business effectively.
5. **Information about activities of business affecting the society:** They have to report the activities of the business organisation affecting the society, which can be determined and described or measured and which are important in its social environment.
6. **Disclosing accounting policies:** These reports have to provide the significant policies, concepts followed in the process of accounting and changes taken up in them during the year to understand these statements in a better way.

IMPORTANCE OF FINANCIAL STATEMENTS

The users of financial statements include management, investors, shareholders, creditors, government, bankers, employees and public at large. Financial statements, provide the necessary information about the performance of the management to these parties interested in the organisation and help in taking appropriate economic decisions. It may be noted that the financial statements constitute an integral part of the annual report of the company in addition to the directors' report, auditors report, corporate governance report, and management discussion and analysis.

The various uses and importance of financial statements are as follows:

1. **Report on stewardship function:** Financial statements report the performance of the management to the shareholders. The gaps between the management performance and ownership expectations can be understood with the help of financial statements.
2. **Basis for fiscal policies:** The fiscal policies, particularly taxation policies of the government, are related with the financial performance of corporate undertakings. The financial statements provide basic input for industrial, taxation and other economic policies of the government.
3. **Basis for granting of credit:** Corporate undertakings have to borrow funds from banks and other financial institutions for different purposes. Credit granting institutions take

decisions based on the financial performance of the undertakings. Thus, financial statements form the basis for granting of credit.

4. **Basis for prospective investors:** The investors include both short-term and long-term investors. Their prime considerations in their investment decisions are security and liquidity of their investment with reasonable profitability. Financial statements help the investors to assess long-term and short-term solvency as well as the profitability of the concern.
5. **Guide to the value of the investment already made:** Shareholders of companies are interested in knowing the status, safety and return on their investment. They may also need information to take decision about continuation or discontinuation of their investment in the business. Financial statements provide information to the shareholders in taking such important decisions.
6. **Aids trade associations in helping their members:** Trade associations may analyse the financial statements for the purpose of providing service and protection to their members. They may develop standard ratios and design uniform system of accounts.
7. **Helps stock exchanges:** Financial statements help the stock exchanges to understand the extent of transparency in reporting on financial performance and enables them to call for required information to protect the interest of investors. The financial statements enable the Stock brokers to judge the financial position of different concerns and take decisions about the prices to be quoted.

LIMITATIONS OF FINANCIAL STATEMENTS

Though utmost care is taken in the preparation of the financial statements and provide detailed information to the users, they suffer from the following limitations:

1. **Do not reflect current situation:** Financial statements are prepared on the basis of historical cost. Since the purchasing power of money is changing, the values of assets and liabilities shown in financial statement do not reflect current market situation.
2. **Assets may not realise:** Accounting is done on the basis of certain conventions. Some of the assets may not realise the stated values, if the liquidation is forced on the company. Assets shown in the balance sheet reflect merely unexpired or unamortised cost.
3. **Bias:** Financial statements are the outcome of recorded facts, accounting concepts and conventions used and personal judgements made in different situations by the accountants. Hence, bias may be observed in the results, and the financial position depicted in financial statements may not be realistic.
4. **Aggregate information:** Financial statements show aggregate information but not detailed information. Hence, they may not help the users in decision-making much.
5. **Vital information missing:** Balance sheet does not disclose information relating to loss of markets, and cessation of agreements, which have vital bearing on the enterprise.
6. **No qualitative information:** Financial statements contain only monetary information but not qualitative information like industrial relations, industrial climate, labour relations, quality of work, etc.
7. **They are only interim reports:** Statement of Profit and Loss discloses the profit/loss for a specified period. It does not give an idea about the earning capacity over time similarly, the financial position reflected in the balance sheet is true at that point of time, the likely change on a future date is not depicted.

INTRODUCTION TO FINAL ACCOUNTS

The transactions of a business are first recorded in Journal then posted to the Ledger and at theend of accounting year, Trial balance is prepared to test accuracy,both the aspects of the transactions have been correctly recordedin the books of accounts of original entry as well as in the Ledger.The last stage in accounting process is the preparation of finalAccounts.

A Trading, Profit & Loss A/c is prepared to determine theProfit or Loss made during a particular year, and Balance Sheet isprepared which consists of all assets, Liabilities and Capital ofproprietor.For preparing Final Accounts from Trial Balance following procedure should be followed:

- **Debit Account balances:** Balances appearing on the debit column of the trial balance may represent - (a) assets (b) Expenses and Losses. Assets are shown on right hand side of the balance sheet while expenses and loss are debited either to the Trading A/c or to the Profit & Loss A/c, depending upon nature of expenditure or loss.

- **Credit Account balances:** Credit items in the trial balance represents (a) Capital, Liabilities, expenses. These items are entered on the left-hand side of the balance sheet (b) Income and gains. These are either credited to Trading A/c or Profit and Loss A/c.

TRADING ACCOUNT

The main purpose of preparing the trading account is to ascertain gross profit or gross loss as a result of buying and selling the goods. However, Gross Profit is the balancing figure, in case debit side total exceeds the credit side, then balance will be Gross Loss, it is shown on credit side of Trading A/c as ‘By Gross Loss’.

A specimen of Trading Account is given below:

Dr. Trading A/c of…………………. for the year ended ……… Cr.

Particulars		Amount	Particulars		Amount
To Opening Stock		xxx	By Sales	xxx	
To Purchases	xxx		Less: Returns	xx	xxx
Less: Returns	xx	xxx	By Closing Stock		xxx
To Carriage Inwards		xxx			
To Wages		xxx	By Gross Loss		xxx
To Freight charges		xxx	(transferred to P& L A/c debit side)		
To Customs Duty		xxx			
To Octroi		xxx			
To Gas, Fuel, Coal, Water		xxx			
To Factory Rent		xxx			
To Factory Expenses		xxx			
To Other Mfg. Expenses		xxx			
To Gross Profit (transferred to P&L A/c credit side)		xxx			
		xxx			xxx

PROFIT AND LOSS ACCOUNT

The business man is always interested to know his Net Profit. It represents the excess of gross profit plus the other revenue. The debit side of Profit & Loss A/c shows the expenses and the credit side the incomes. If the total of the credit side is more, it will be the Net Profit. And if the debit side is more, it will be Net Loss.

Profit and Loss A/c is prepared to calculate the net profit or net loss. The balance of Trading A/c i.e. Gross profit / Gross loss is transferred to the Profit and Loss Account. Therefore, all those expenses and Losses are debited to the Profit and Loss A/c. Other income / gains are credited to this A/c e.g. commission received, discount earn etc.

The Profit and Loss accounts measures net profit by matching revenues and expenses according to the accounting principles, Net profit is the excess of revenue over total expenses. It should be kept in mind that all expenses / incomes must be adjusted in respect of outstanding / prepaid / paid or received in advance. Expenses or incomes are considered on mercantile basis. At end Net Profit or Net Loss transferred to Capital Account in the balance sheet.

A specimen of Profit & Loss Account is given below:

Dr. Profit & Loss A/c of ………………for the year ended……… Cr.

Particulars	Amount	Particulars	Amount
To Gross Loss b/d	xxx	By Gross Profit b/d	xxx
To Office Salaries	xxx	By Interest received	xxx
To Rent, Rates, Taxes	xxx	By Discount received	xxx
To Printing & Stationery	xxx	By Commission received	xxx
To Legal Charges & Audit fee	xxx	By Investments	xxx
To Insurance, Interest	xxx	By Dividend on shares	xxx
To General, Admin. Expenses	xxx	By Rent received	xxx
To Advertisements	xxx	By Net Loss -------→	
To Bad Debts	xxx	(transferred to capital a/c)	
To Carriage Outwards	xxx		
To Repairs	xxx		
To Depreciation	xxx		
To Interest on Capital, Loans	xxx		
To Discount Allowed	xxx		
To Commission Allowed	xxx		
To Net Profit-------→	xxx		
(transferred to capital a/c)	xxx		
	xxxx		xxxx

It may be noted that:

1) Direct Expenses which are debited to Trading A/c are not debited again to Profit & loss A/c.
2) Personal expenses are not debited to this account.
3) Income Tax, Wealth Tax or Life insurance premium paid are personal expenses of proprietor / partners.
4) Items shown in Trial Balance should be given one effect and adjustment given below Trial Balance should be given two effects.

5) It should be noted that, Trading Account and Profit & Loss Account are not prepares separately as shown above but they are prepared as one account split up into two sections. As such the combined heading is given as 'Trading and Profit & Loss A/c for the year ended…'

BALANCE SHEET

Balance Sheet is a statement which shows the financialposition of a business entity on a given date. It is prepared fromtrial balance, after all nominal accounts and accounts relating toTrading, Profit & Loss account. According to **J.R.Botliboi -** *"A balance sheet is a statement with a view to measure exact financial position of a business at a particular date".*

Accounts left out are Real accountsand personal accounts. Accounts having debit balancestransferred to Assets side of balance sheet and account havingcredit balance transferred to Liabilities side of Balance Sheet, insome cases credit balances may be deducted from particular asset. E.g. provision for depreciation deducted from Fixed Asset; Reservefor bad & doubtful, is deducted from sundry debtors. Balancesshown in Balance Sheets are carried forward for next year.

The Balance Sheet has also two sides. The Left-hand sideis headed as 'Liabilities' and Right-hand side is headed as 'Assets'.It is not an account, therefore in no 'To' or 'By' proceeding thenames of the Account recorded in the Balance Sheet.Balance Sheet shows financial position as on a particulardate and not for the year. Therefore, the heading of Balance Sheetis worded as"Balance Sheet of ….. as on …..".Thus, Balance sheet is defined as a statement which sets out the assets and liabilities of a business firm and which serves to ascertain the financial position of the same on any particular date.

A specimen of Balance Sheet is given below:

Balance Sheet of. …………………… as on …………………

Liabilities		**Amount**	**Assets**		**Amount**
Capital	xxx		Cash in Hand		xxx
Add: Net Profit	xxx		Cash at Bank		xxx
Interest	xxx		Bills Receivable		xxx
	xxx		Debtors	xxx	
Less: Drawings	xxx		**Less:** Bad Debts	xxx	xxx
Net Loss	xxx		Investments		xxx
Creditors		xxx	Furniture & Fittings		
Bills Payable		xxx	**Less:** Depreciation	xxx	xxx
Bank Overdraft		xxx	Plant & Machinery	xxx	
Loans		xxx	**Less:** Depreciation	xxx	xxx
Add: Interest		xxx	Land & Buildings	xxx	
Mortgage		xxx	**Less:** Depreciation	xxx	xxx
Reserve fund		xxx	Patents, Copyrights		xxx
Outstanding Expenses		xxx	Goodwill, Trade Marks		xxx
			Prepaid Expenses		xxx
			Outstanding Incomes		xxx
			Closing Stock		xxx
		XXX			XXX

Marshalling of Balance Sheet:

1. Assets are arranged in order of their Liquidity i.e. in order inwhich they can be converted into cash and Liabilities they arepayable. As assets which can be immediately converted intocash will be taken first and then in order will follow the others.Similarly, Liability which is to be paid off immediately will betaken first and then next and so on.
2. The assets & liabilities are arranged in exactly the reverse orderof the above arrangement.

Classification of Assets

1. **Fixed Assets:** These assets are acquired for long use in the business itself and not for sale. e.g. Building, Plant & Machinery etc.
2. **Current or Floating Assets:** These assets are to be converted into cash as soon as possible. e.g. stock of goods, Sundry Debtors, Bills Receivable.
3. **Liquid / Quick Assets:** These assets can be converted into cash as quickly as possible, without undue Loss. e.g. Sundry Debtors, Bank Balance, short term govt. securities.
4. **Wasting Assets:** Are those fixed assets which have fixed content like coal in coal mine.
5. **Intangible Assets:** Are those Fixed Assets which cannot be seen or touched or felt, i.e. having no physical existence, e.g. Goodwill.
6. **Fictitious Assets:** Are worthless assets but shown as assets in the Balance Sheet. E.g. preliminary expenses, Discount on issue of debentures.

Classification of Liabilities

1. Capital and reserves: These are the investments made by the investors or shareholder or owners. It includes share capital, reserves and surplus, retained earnings, profit and loss.
2. **Fixed and Long-term Liabilities:** Are those Liabilities which are payable after a long period of time. For example, Bank Loan, Debentures.
3. **Current Liabilities:** These are short term Liabilities payable usually within year. For example, sundry creditors, Bills Payable, outstanding expenses, bank overdraft, etc..
4. **Contingent Liabilities:** These are not actual Liabilities as on date of Balance Sheet, which may or may not be payable in future, depend on the happening of certain events. In future, however due present circumstances; whether to pay or not, depends upon further happenings. Therefore, existence of contingent liabilities shown below total liabilities by way of note for the sake of information and disclosure. e.g. investment in partly paid shares, compensation suit pending in court, Bills discounting but not matured, such Liabilities are shown as a foot note in the Balance Sheet on liabilities side.

Limitations of Balance Sheet

1. Balance sheet is considered to be a static document. The real position of the concern keeps on changing.
2. Stock valuation/ method of depreciation are different, which effects on financial position.
3. Window-dressing is accomplished in general ways, e.g. not making adequate provisions.
4. Fixed assets are shown at historical cost less depreciation.However, actual value of fixed assets, like Land might haveappreciated much more.

FINAL ACCOUNTS – ADJUSTMENTS

The adjustments to be made to final accounts will be given under the Trial Balance. Every adjustment is to be made in the final accounts twice:

1. once in Trading A/c and Profit & Loss A/c and
2. other in Balance Sheet

The following are some of the important adjustments to be made at the time of preparing of final accounts:

S No	Item	If given in Trail Balance	If given in adjustment
1	Closing Stock	Shown only in balance sheet "Assets Side".	1. It should be posted at the credit side of "Trading A/c". 2. Shown at the asset side of the "Balance Sheet".
2	Outstanding Expenses	Shown only on the liabilities side of Balance Sheet.	1. It should be added to the concerned expense at the debit side of Profit & Loss A/c or Trading A/c. 2. It should be added at the liabilities side of the Balance Sheet.
3	Prepaid Expenses	Shown only in assets side of the Balance Sheet.	1. Deducted from the concerned expense in debit side of Profit & Loss A/c or Trading A/c. 2. It should be shown at the assets side of the Balance Sheet.
4	Depreciation	Shown only on the debit side of the profit and loss account.	1. It should be shown on the debit side of the Profit & Loss A/c. 2. It should be deduced from concerned asset in Balance sheet assets side.
5	Bad Debts	Shown on the debit side of the profit and loss account.	1. It should be shown on the debit side of the Profit & Loss A/c. 2. It should be deducted from debtors in the assets side of the Balance Sheet.
6	Outstanding Income (or) Accrued Income	Shown only on the assets side of the Balance Sheet.	1. It should be added to the concerned income at the credit side of Profit & Loss A/c. 2. It should be shown at the assets side of the Balance sheet.

7	Interest on Loan	Shown only on debit side of the profit and loss account.	1. It should be shown on debit side of the Profit & Loss A/c. 2. Added to loan in the liabilities side of the Balance Sheet.
8	Provision for Doubtful Debts	Shown on the debit side of the profit and loss account.	1. Shown on the debit side of the Profit & Loss A/c. 2. Deducted from debtors in the assets side of the Balance Sheet.
9	Unearned Income	Shown only on the liabilities side of the Balance Sheet.	1. Deducted from the concerned income at the credit side of Profit & Loss A/c. 2. Shown in liabilities side of Balance sheet.
10	Interest on Capital	Shown only on debit side of the profit and loss account.	1. It should be shown on debit side of the Profit & Loss A/c. 2. Added to the capital in the liabilities side of the Balance Sheet.

ILLUSTRATIONS

1. From the following trail balance of Surya & Co. as on 31st March 2020, Prepare the Trading account, Profit & Loss account and Balance sheet as on date.

Particulars	Debit (Rs.)	Credit (Rs.)
Capital		70,000
Purchases	40,000	
Sales		75,000
Returns	1,000	2,000
Opening stock	20,000	
Wages	1,000	
Coal & Power	1,500	
Carriage Inwards	3,000	
Salaries	2,000	
Sundry Debtors	15,000	
Sundry Creditors		12,500
Bills Payable		5,000
Bills Receivable	10,000	
Plant & Machinery	7,500	
Cash in Hand	27,000	
Cash at Bank	15,000	

Discount	500	
Discount received		2,000
Loans		5,000
Bank Overdraft		5,000
Buildings	33,000	
Total	**176,500**	**176,500**

Adjustments:

1. Closing stock Rs.30,000

Solution:

Dr. Trading A/c of Surya & co. for year ending 31-03-2020 Cr.

Particulars		Amount	Particulars		Amount
To Opening stock		20,000	By Sales	75,000	
To Purchases	40,000		(-) Sales returns	1,000	74,000
(-) P. Returns	2,000	38,000			
To wages		1,000	By Closing stock		30,000
To Coal & Power		1,500			
To Carriage inwards		3,000			
To Gross Profit c/d		40,500			
		1,04,000			1,04,000

Dr. Profit & Loss A/c of Surya & co. for year ending 31-03-2020 Cr.

Particulars	Amount	Particulars	Amount
		By Gross Profit b/d	40,500
To Salaries	2,000	By Discount received	2,000
To Discount	500		
To Net Profit	40,000		
	42,500		42,500

Balance Sheet of Surya & co. as on 31-03-2020

Liabilities		Amount	Assets	Amount
Capital	70,000		Sundry Debtors	15,000
(+) Net Profit	40,000	110,000	Bills Receivable	10,000
			Plant & Machinery	7,500
Sundry Creditors		12,500	Cash in Hand	27,000
Bills Payable		5,000	Cash at Bank	15,000
Loans		5,000	Buildings	33,000
Bank Overdraft		5,000	Closing stock	30,000
		1,37,500		1,37,500

2. Prepare the trading, profit & Loss account and Balance Sheet of Krish & Co. for the following as on 31st March 2020

Particulars	Debit (Rs.)	Credit (Rs.)
Capital		25000
Loans		5000
Sales		35000
Bills Payable		5000
Accounts Payable		4,000
Purchase Returns		2,000
Dividend Received		3,000
Plant and Machinery	13000	
Buildings	17,000	
Receivables	9,650	
Purchases	18,000	
Discount allowed	1,200	
Wages	7,000	
Salaries	3,000	
Travelling Expenses	750	
Freight charges	200	
Insurance	300	
Commission paid	100	
Bank	1,700	
Repairs	500	
Investment on loans	600	
Opening stock	6,000	
Total	**79,000**	**79,000**

Adjustments:
1. Closing stock Rs. 8,000
2. Depreciation on plant and machinery at 15%
3. Depreciation on buildings at 10%
4. Provision for doubtful receivables Rs. 500
5. Prepaid Insurance Rs. 50
6. Outstanding Wages Rs. 100

Solution:

Dr. Trading A/c of Krish & co. for year ending 31-03-2020 Cr.

Particulars		Amount	Particulars	Amount
To Opening stock		6,000	By Sales	35,000
To Purchases	18,000			
(-) P. Returns	2,000	16,000	By Closing stock	8,000
To Wages	7,000			
(+) Outstanding	100	7,100		
To Freight charges		200		
To Gross Profit c/d		13,700		
		43,000		43,000

Dr. Profit & Loss A/c of Krish & co. for year ending 31-03-2020 Cr.

Particulars		Amount	Particulars	Amount
			By Gross Profit b/d	13,700
To Dep. on P&M		1,950	By Dividend Received	3,000
To Dep. on Buildings		1,700		
To Provision for D.R		500		
To Discount Allowed		1,200		
To Salaries		3,000		
To Travelling expense		750		
To Insurance	300			
(-) Prepaid	50	250		
To Commission paid		100		
To Repairs		500		
To Net Profit		6,750		
		16,700		16,700

Balance Sheet of Krish & co. as on 31-03-2020

Liabilities		Amount	Assets		Amount
Capital	25,000		Plant & Machinery	13,000	
(+) Net Profit	6,750	31,750	(-) Depreciation	1950	11,050
			Buildings	17,000	
Loans		5,000	(-) Depreciation	1700	15,300
Bills Payable		5,000	Receivables	9,650	
Accounts Payable		4,000	(-) Provision for D.R	500	9,150
Outstanding Wages		100	Prepaid Insurance		50
			Bank		1,700
			Investment		600
			Closing stock		8,000
		45,850			45,850

3. From the following Trial Balance and additional information prepare Trading, Profit and Loss Account for the year ended 31/03/2020 and Balance Sheet as on that date of Shri Ankur.

Particulars	Debit (Rs.)	Credit (Rs.)
Sundry Debtors	88,000	
Capital		316,300
Salaries	9,000	
Commission	800	
Furniture	90,000	
Creditors		81,000
Dividend		4,000
Machinery	156,000	
Bad debts	2,250	
Advertisement	1,000	
Investments	38,000	
Bills Payable		18,000
Opening Stock	32,000	
Insurance	11,000	
Drawings	17,000	
Cash in hand	35,000	
Cash at Bank	51,000	
Interest		900
Purchases	134,500	
Sales Returns	1,800	
Wages	6,500	
Bills Receivable	32,000	
Purchase Return		2,300
Sales		210,000
Carriage Inward	2,100	
Octroi	1,500	
Bank Overdraft		76,950
Total	**7,09,450**	**7,09,450**

Adjustments –

1) Closing Stock Rs.33,000/-.
2) Wages Outstanding Rs.2,000/-.
3) Insurance prepaid Rs.2,500/-.
4) Depreciate Machinery at the rate of 10% and Furniture 15%.
5) Bad debts on debtors @5%

Dr. Trading A/c of Shri Ankur for year ending 31-03-2020 Cr.

Particulars		Amount	Particulars		Amount
To Opening Stock		32,000	By Sales	210,000	
To Purchases	1,34,500		(-) Sales Returns	1,800	2,08,200
(-) Purchase Returns	2,300	1,32,200			
To Wages	6,500		By Closing Stock		33,000
(+) Outstanding	2,000	8,500			
To Carriage Inwards		2,100			
To Octroi		1,500			
To Gross Profit c/d		64,900			
		2,41,200			2,41,200

Dr. Profit & Loss A/c of Shri Ankur for year ending 31-03-2020 Cr.

Particulars		Amount	Particulars	Amount
To Bad debts (old)	2,250		By Gross Profit b/d	64,900
(+) New Bad debts	4400	6,650	By Dividend	4,000
To Salaries		9,000	By Interest	900
To Commission		800		
To Depreciation on Furniture		13,500		
To Depreciation on Machinery		15,600		
To Advertisement		1,000		
To Insurance	11,000			
(-) Prepaid	2,500	8,500		
To Net Profit		14,750		
		69,800		69,800

Balance Sheet of Shri Ankur as on 31-03-2020

Liabilities		Amount	Assets		Amount
Capital	3,16,300		Sundry Debtors	88,000	
(-) Drawings	17,000		(-) Bad debts	4400	83,600
	2,99,300		Furniture	90,000	
(+) Net Profit	14,750	3,14,050	(-) Depreciation	13500	76,500
Creditors		81,000	Machinery	156,000	
Bills Payable		18,000	(-) Depreciation	15,600	1,40,400
Outstanding Wages		2,000	Investments		38,000
Bank Overdraft		76,950	Prepaid Insurance		2,500
			Cash in Hand		35,000
			Cash at Bank		51,000
			Bills Receivable		32,000
			Closing Stock		33,000
		4,92,000			4,92,000

4. From the following information prepare Trading account, Profit &Loss account and Balance sheet as on 31-3-2020.

Sales	4,00,000	Sundry debtors	1,20,000
Capital	50,000	Carriage inwards	2,500
Land	50,000	Bad debts	10,000
Opening stock	20,000	Carriage outwards	75,000
Wages	5,000	Salaries	60,000
Purchase Returns	10,000	Rent (credit)	20,000
Interest	5,000	Bills payable	30,000
Sundry Creditors	60,000	Buildings	70,000
Furniture	60,000	Purchases	1,00,000
Rent	10,000	Bills Receivable	50,000
Loans	67,500		

Adjustments:

1. Closing stock Rs. 60,000
2. Outstanding wages Rs. 1000
3. Doubtful debts on sundry debtors @ 5%
4. Depreciation on furniture @ 10% and on buildings @ 10%

Solution:

Dr. Trading and Profit & Loss A/c for year ending 31-03-2020 Cr.

Particulars		Amount	Particulars	Amount
To Opening stock		20,000	By Sales	4,00,000
To Purchase	1,00,000		By Closing Stock	60,000
(-) Returns	10,000	90,000		
To Wages	5,000			
(+) outstanding	1,000	6,000		
To Carriage Inwards		2,500		
To Gross Profit c/d		3,41,500		
		4,60,000		4,60,000
To Salaries		60,000	By Gross Profit b/d	3,41,500
To Rent		10,000	By Rent	20,000
To Bad debts	10,000			
(+) New Bad debts	6,000	16,000		
To Interest		5,000		
To Depreciation on Buildings		7,000		
To Depreciation on Furniture		6,000		
To Carriage Outwards		75,000		
To Net Profit (transferred to Capital a/c)		1,82,500		
		3,61,500		3,61,500

Balance Sheet as on 31-03-2020

Liabilities		Amount	Assets		Amount
Sundry Creditors		60,000	Land		50,000
Bills Payable		30,000	Bills Receivable		50,000
Outstanding wages		1,000	Debtors	1,20,000	
Capital	50,000		(-) Bad debts	6,000	1,14,000
(+) Net profit	1,82,500	2,32,500	Buildings	70,000	
Loans		67,500	(-) Depreciation@10%	7,000	63,000
			Furniture	60,000	
			(-) Depreciation@10%	6,000	54,000
			Closing stock		60,000
		3,91,000			3,91,000

5. From the following information, prepare the Trading account, Profit& Loss account and Balance sheet as on 31-3-2020.

Opening stock	30,000	Wages	1,000
Purchase	45,000	Sales	70,000
Sales Returns	3,000	Purchase returns	2,000
Carriage inwards	1,000	Power & fuel	500
Salaries	1,000	Interest	2,000
Rent	500	Insurance	500
Bad debts	500	Commission (Credit)	10,000
Capital	80,000	Discount (credit)	15,000
Creditors	40,000	Bank overdraft	20,000
Cash at bank	15,000	Machinery	40,000
Land & buildings	50,000	Sundry debtors	50,000

Adjustments:

a) Closing stock Rs. 40,000
b) Prepaid carriage inwards Rs. 500
c) Deprecation on land & buildings @ 10%
d) Deprecation on Machinery @ 10%
e) Bad debts on sundry debtors @ 5%

Solution:

Dr. Trading and Profit & Loss A/c for year ending 31-03-2020 Cr.

Particulars		Amount	Particulars		Amount
To Opening stock		30,000	By Sales	70,000	
To Purchase	45,000		(-) Returns	3,000	67,000
(-) Returns	2,000	43,000	By Closing Stock		40,000
To Wages		1,000			
To Power & Fuel		500			
To Carriage Inwards	1,000				
(-) prepaid	500	500			
To Gross Profit c/d		32,000			
		1,07,000			1,07,000

To Salaries	1,000	By Gross Profit b/d	32,000
To Rent	500	By Discount	15,000
To Bad debts	500	By Commission	10,000
To Interest	2,000		
To Insurance	500		
To Depreciation on L & B	5,000		
To Depreciation on Machinery	4,000		
To Net Profit	43,500		
	57,000		57,000

Balance Sheet as on 31-03-2020

Liabilities		Amount	Assets		Amount
Sundry Creditors		40,000	Cash at Bank		15,000
Bank Overdraft		20,000	Debtors	50,000	
Capital	80,000		(-) Bad debts	2,500	47,500
(+) Net profit	43,500	1,23,500	Closing stock		40,000
			Land & Buildings	50000	
			(-)Depreciation@10%	5,000	45,000
			Prepaid Carriage Inwards		500
			Machinery	40,000	
			(-)Depreciation@10%	4,000	36,000
		1,83,500			1,83,500

ACCOUNTING RATIOS

Ratio Analysis is a process of determining and interpreting numerical relationships based on financial statements. It is a technique which is used to evaluate the financial conditions, strength or weakness and performance of a business. By computing ratios it is easy to understand the financial position of the firm. The main purpose is to measure past performance and project future trends.

A numerical relationship between two digits or two numbers is known as Ratio. “The relationship of one item to another expressed in simple mathematical form is known as Ratio.” Ratio analysis plays a significant role in ascertaining the financial performance of a company or organization and it is useful to various users like Management, Investors, Creditors/ Shareholders, Employees, Government.

Limitations of Ratio Analysis:

A lot of care, caution and intelligence is needed in using these ratios, because there are number limitations in using these ratios:

1. **Accounting ratios are retrospective**: The ratios are computed based on the past data or previous performance. They may not necessarily hold good in the future and may not be helpful in decision making projections into future.
2. **Accounting methods, policies and procedures are not common**: Where accounting data is generated following different accounting methods the ratios are not strictly

comparable. The difference in accounting methods or policies may lead to distorted conclusions.

3. **Inflationary tendencies cannot be highlighted:** In times of inflation, the accounting data of several years cannot be compared. An analysis of such data based on ratios cannot be meaningful.
4. **Concepts of ratios are not the same:** Based on the needs of the firm, the ratios are built upon. The formula may have been different. Inter firm comparison cannot be realistic in such a case.
5. **Qualitative factors cannot be considered:** Factors such a character or managerial abilities cannot be considered here. It is purely quantitative analytical tool.
6. **Ratio by itself has no utility:** Ratios to be meaningful have to be read along with the other ratios. Any single ratio is meaningless by itself.
7. **Ratios can be manipulated:** During festival season, there will be good turnover of stocks when compared to the earlier periods. If this inventory turnover ratio is considered for decision making, the results get distorted. It is necessary to consider the average inventories to present a fair view of the business activity.
8. **Factors weakening ratio analysis:** Sudden changes in the economy such as economic crisis, lack of uniform data, identifying the right type of ratio for analysis and interpretation and so forth are some of the factors that threaten the utility of ratio analysis

Classification of Ratio's:

These ratios' can be grouped into four broad categories according to the financial activity:

1. Liquidity Ratios
2. Activity Ratios
3. Profitability Ratios
4. Capital Structure Ratios

LIQUIDITY RATIO

Liquidity ratio measures the firm's ability to meet its current obligations. If the firm is not in a position to meet its short-term commitments like payment of taxes, wages, salaries, etc, it cannot continue the business. It helps in identifying the danger signals for the firm in advance. It is classified as follows:

✍ CURRENT RATIO:

Current ratio is the ratio, which express relationship between current assets and current liabilities. Current assets are those which can be converted into cash within a short period of time, normally not exceeding one year. Current liabilities are short-term maturing to be met.

Current Ratio = Current Assets / Current Liabilities

Note: Answer must be 2 or more than 2 (i.e 2:1); otherwise company performance is not satisfactory.

- Current Assets = Closing Stock, Debtors, Bills Receivable, Cash at bank, Cash in hand, Prepaid expenses, Income yet to be received, etc.

- Current Liabilities = Creditors, Bank Over Draft, Bills payable, outstanding expenses, Incomes received in advance, all provisions, Dividends payable, etc.

✍ **QUICK OR ACID TEST RATIO:**

The acid test ratio is a measure of liquidity designed to overcome the defect of current ratio. It is often referred to as quick ratio because it is a measurement of firm's ability to convert its current assets quickly into cash in order to meet its current liabilities.

Quick ratio = Current assets – (Prepaid expenses + Closing stock) / Current Liabilities (or) Quick Ratio = Quick Assets / Current Liabilities

Note:Answer must be 1 or more than 1 (i.e. 1:1)

- Quick Assets = Debtors, Bills Receivable, Cash at bank, Cash in hand, Income yet to be received, etc.
- Current Liabilities = Creditors, Bank Over Draft, Bills payable, outstanding expenses, Incomes received in advance, all provisions, Dividends payable, etc.

✍ **LIQUIDITY RATIO:**

The liquidity ratio is a measure of liquidity designed to overcome the defect of current ratio.

Liquidity Ratio = Liquid assets / Current Liabilities

Note: Answer must be 1 or more than 1 (i.e. 1:1)

- Liquid Assets = Cash at bank, Cash in hand.
- Current Liabilities = Creditors, Bank Over Draft, Bills payable, outstanding expenses, Incomes received in advance, all provisions, Dividends payable, etc.

ACTIVITY / TURNOVER / EFFICIENCY RATIOS

Activity ratios are sometimes called as efficiency ratios. Activity ratios are concerned with how efficiency the assets of the firm are managed. These ratios express relationship between level of sales and the investments in various assets inventories, receivables, fixed assets etc. These are of 3 types:

✍ **INVENTORY TURNOVER RATIO:**

It is also called stock turnover ratio. It indicates the number of times the average stock is being sold during a given accounting period. It establishes the relation between the cost of goods sold during a given period and the average amount of inventory outstanding during that period. The higher the inventory turnover ratio, the better is the performance of the firm in selling its stock.

Inventory Turnover Ratio = Cost of Goods Sold / Average Inventory

Note:Answer must end with times for Eg: if answer is 9. Write it as 9 times

- Cost of goods sold = Sales - Gross profit (or) Opening stock + Purchases + Mfg expenses – Closing stock
- Average Inventory/ Average Stock = Opening stock + Closing Stock / 2

✍ **DEBTOR'S TURNOVER RATIO:**

It reveals the number of times the average debtors are collected during a given accounting period. In other words, it shows how quickly the firm is in a position to collect its debts.

Debtors Turnover Ratio = Credit Sales / Average Debtors
(or)
Debtors Turnover Ratio = Total Sales / Debtors

Note: Answer must end with times for eg: if answer is 9. Write it as 9 times

- Credit sales = It refers to goods sold on credit.
- Average Debtors = Opening Debtors + Closing Debtors / 2

Debt / Average Collection Period:It refers to the time taken to collect the debts. The lesser the time, the more is the efficiency.

Debt / Average Collection Period = Debtors / Sales x Days in a year

✍ **CREDITOR'S TURNOVER RATIO:**

It reveals the number of times the average creditors are paid during a given accounting period.

Creditors Turnover Ratio = Credit Purchases / Average Creditors
(or)
Creditors Turnover Ratio = Purchases / Creditors

Note: Answer must end with times for eg: if answer is 9. Write it as 9 times

- Credit sales = It refers to goods sold on credit.
- Average Creditors = Opening Creditors + Closing Creditors / 2

Credit Collection Period: It refers to the time taken to collect the debts. The lesser the time, the more is the efficiency.

Credit Collection Period = Debtors / Sales x Days in a year
(or)
Credit Collection Period = 365 days / Credit Turnover Ratio

✍ **WORKING CAPITAL TURNOVER RATIO:**

It reveals the relationship between the cost of goods sold and working capital during a given accounting period.

Working Capital Turnover Ratio = Sales / Working Capital

Note: Answer must end with times for eg: if answer is 9. Write it as 9 times

- Working Capital = Current Assets – Current Liabilities

SOLVENCY / CAPITAL STRUCTURE / LEVERAGE RATIOS

Leverage or Capital Structure ratios are the ratios, which indicate the relative interest of the owners and the creditors in an enterprise. These ratios indicate the funds provided by the long-term creditors and owners.

✍ **DEBT-EQUITY RATIO:**

Debt Equity ratio expresses the relationship between debt (Outsider's funds) and Equity (Owner's funds). This ratio explains how far owned funds are sufficient to pay outside liabilities.

Debt Equity Ratio = Outsiders' funds / Insiders' funds (or) Debt Equity Ratio = Debt / Equity

Note: Answer must be 1(exactly); otherwise the company is in bad condition

- Outsiders Funds= Debentures, Bonds, Long term loans, current liabilities, etc.
- Insider funds= Equity & Preference Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.

✍ **INTEREST COVERAGE RATIO**:

Interest coverage ratio is calculated to judge the firm's capacity to pay the interest on debt it borrows. It gives an idea of extent the firm's earnings may contract before it is unable to pay interest payments out of current earnings.

Interest Coverage Ratio=Net Profit Before interest & Taxes (EBIT) / Fixed interest

Note: Answer must end with times for Eg: if answer is 9. Write it as 9 times

- Net Profit before Interest & Tax = Net profit After Tax + Tax + Interest on debentures or Long-Term loans
- Fixed Interest charges = Interest on debentures or long-term loans

✍ PROPRIETARY RATIO / PROPRIETORS' FUNDS TO TOTAL ASSETS RATIO:

It establishes relationship between proprietors' funds and the total assets.

Proprietary Ratio = Owners' funds / Total Assets x 100

Note: Answer must end with a percentage value.

- Owners' funds= Equity & Preference Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.
- Total Assets = Current Assets + Fixed Assets (except Intangible assets)

✍ NET WORTH TO DEBT RATIO:

It gives relationship between Net worth or proprietary funds and debt.

Net worth to Debt Ratio = Net worth / Debt

- Debt= Debentures, Bonds, Long term loans & Loans from others, current liabilities.
- Net worth= Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.

✍ FIXED ASSETS TO PROPRIETORS' FUNDS RATIO:

It establishes relationship between fixed assets to Proprietors' funds.

Fixed Assets to Proprietors' Funds Ratio = Fixed Assets / Proprietors' funds x 100

Note: Answer must end with a percentage value.

- Proprietors' funds= Equity & Preference Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.
- Fixed Assets = Land, Building, Plant, Machinery, Furniture, etc.

✍ CURRENT ASSETS TO PROPRIETORS' FUNDS RATIO:

It establishes relationship between current assets to Proprietors' funds.

Fixed Assets to Proprietors' Funds Ratio = Current Assets / Proprietors' funds x 100

- Proprietors' funds: Equity & Preference Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.
- Current Assets = Closing Stock (stock), Debtors, Bills Receivable, Cash at bank, Cash in hand, Prepaid expenses, Income yet to be received, etc.

✍ INVENTORY TO WORKING CAPITAL RATIO:

It establishes relationship between stock and working capital.

Inventory to Working Capital Ratio = Inventory / Working Capital

- Working Capital = Current Assets – Current Liabilities

PROFITABILITY RATIO

Profitability ratios throw light on how well the firm is organizing its activities in a profitable manner. The owners expect reasonable rate of return on their investment. The firm should generate enough profits not only to meet the expectations of the owners, but also to finance the expansion activities.

✍ GROSS PROFIT RATIO:

Gross profit ratio is the ratio between gross profits to sales during a given period. It is expressed in terms of percentage.

Gross Profit Ratio = (Gross Profit / Net Sales) X 100

Note:The higher the ratio the better is profitability.

- Gross Profit = Net Sales – Cost of goods sold
- Net Sales = Sales – Sales Returns

✍ NET PROFIT RATIO:

Net Profit is the ratio between net profits after taxes and net sales. It indicates what portion of sales is left to the owners after operating expenses.

Net Profit Ratio = (Net profit after taxes / Net sales) X 100

Note: The higher the ratio the better is profitability.

✍ OPERATING RATIO:

Operating ratio is the ratio between costs of goods sold plus operating expenses and the net sales. This is expressed as a percentage to net sales. The higher the operating ratio, the lower is the profitability and vice-versa.

Operating Ratio = (Operating Expenses / Net sales) X 100

- Operating Expenses= Cost of goods sold + Administrative expenses + Office expenses + Selling & Distribution Expenses.
- Net Sales = Sales – Sales Returns

✍ EARNINGS PER SHARE:

EPS is the relationshipbetween net profits and the number of shares outstanding at the end of the given period. This can be compared with previous years to provide a basis for assessing the company’s performance.

EPS = (Net Profit after Taxes / No. of Shares outstanding)

✍ **PRICE/ EARNINGS RATIO:**

This is the share price divided by the earnings per share

Price/ Earnings Ratio = (Market price per share / Earnings Per share)

✍ **RETURN ON INVESTMENT (ROI):**

It is one of the very important parameters affecting business plans. The profitability of the firm is measured in terms of return on investment. It refers to total assets, capital employed or owners' equity.

ROI = Net Profit after taxes / Total Investment or owners equity

✍ **RETURN ON CAPITAL EMPLOYED (ROCE):**

It shows whether the funds entrusted to the management have been properly used or not.

ROCE = Net Profit after taxes / Capital Employed

- Capital Employed = Share capital, debentures and reserves, etc.

✍ **RETURN ON EQUITY (ROE):**

This relates to the net profits available to equity shareholders to amount invested by them. The higher the ROE the more is profitability and vice versa.

ROE = Net Profits – Dividends payable to Pref. shareholders / Equity share capital

✍ **RETURN ON TOTAL ASSETS (ROTA):**

This relates to the total assets available to equity shareholders to amount invested by them.

ROTA = Operating Profits / Total Assets

- Operating Profits = Net profit – Profit on sale of assets
- Total Assets = current assets + fixed assets

ILLUSTRATIONS

Illustration-01:

From the following information calculate the different ratios

Items	Amount	Items	Amount
10% Debentures	1,50,000	Cash in hand	30,000
5% Long term loan	1,20,000	Cash at bank	10,000
Preference share capital	1,26,000	Debtors	45,000
Equity share capital (10,000 @ 15 each)	1,50,000	Opening stock	50,000
		Closing stock	40,000
Bank overdraft	20,000	Prepaid Expenses	15,000
Profit after tax	24,000	Gross profit	45,000
Creditors	30,000	Land & Buildings	3,50,000
Bills payable	15,000	Machinery	1,05,000
Sales	1,25,000	Purchases	70,000
	760,000		**760,000**

Solution:

LIQUIDITY RATIOS

✍ CURRENT RATIO

Current Ratio = Current Assets / Current Liabilities

Current assets = 30,000+10,000+45,000+40,000+15,000=1,40,000

Current liabilities = 20,000+30,000+15,000=65,000

CR = 1,40,000 / 65,000
= 2.15:1

- Current Assets = Closing Stock, Debtors, Bills Receivable, Cash at bank, Cash in hand, Prepaid expenses, Income yet to be received, etc.
- Current Liabilities = Creditors, Bank Overdraft, Bills payable, outstanding expenses, Incomes received in advance, all provisions, short term debts, etc.

✍ QUICK OR ACID TEST RATIO

Quick ratio = Current assets – (Prepaid expenses + Closing stock) / Current Liabilities
(or)
Quick Ratio = Quick Assets / Current Liabilities

Quick assets = 1,40,000 - (40,000 + 15,000) = 85,000

QR = 85,000 / 65,000
= 1.30:1

- Quick Assets = Debtors, Bills Receivable, Cash at bank, Cash in hand, Income yet to be received, etc.
- Current Liabilities = Creditors, Bank Overdraft, Bills payable, outstanding expenses, Incomes received in advance, all provisions, short term debts, etc.

✍ LIQUIDI RATIO

Liquidity Ratio = Liquid assets / Current Liabilities

Liquid assets = 30,000 + 10,000 = 40,000

LR = 40,000 / 65,000
= 0.62:1

- Liquid Assets = Cash at bank, Cash in hand.
- Current Liabilities = Creditors, Bank Overdraft, Bills payable, outstanding expenses, Incomes received in advance, all provisions, short term debts, etc.

ACTIVITY / TURNOVER / EFFICIENCY RATIOS

✍ INVENTORY TURNOVER RATIO

Inventory Turnover Ratio = Cost of Goods Sold / Average Inventory

COGS = 1,2,5000 - 45,000 = 80,000

Average inventory = (50,000 + 40,000)/2 = 45,000

ITR = 80000 / 45000
= 1.77 times

- Cost of goods sold = Sales - Gross profit (or) Opening stock + Purchases + Manufacturing expenses – Closing stock
- Average Inventory/ Average Stock = Opening stock + Closing Stock / 2

✍ DEBTOR'S TURNOVER RATIO

Debtors Turnover Ratio = Credit Sales / Average Debtors
(or)
Debtors Turnover Ratio = Total Sales / Debtors

DTR = 1,25,000/45,000
= 2.77 times

- Credit sales = It refers to goods sold on credit.
- Average Debtors = Opening Debtors + Closing Debtors / 2

Debt / Average Collection Period:

Debt / Average Collection Period = 365 days/Debtors turnover ratio
= 365 / 2.77
= 132 days

✍ **CREDITOR'S TURNOVER RATIO:**

Creditors Turnover Ratio = Credit Purchases / Average Creditors
(or)
Creditors Turnover Ratio = Purchases / Creditors
= 70,000 / 30,000
= 2.33 times

- Credit purchases = It refers to goods purchased on credit.
- Average Creditors = Opening Creditors + Closing Creditors / 2

Credit Collection Period:

Credit Collection Period = 365 days / Credit Turnover Ratio
= 365 / 2.33
= 156.65 days

✍ **WORKING CAPITAL TURNOVER RATIO:**

Working Capital Turnover Ratio = Sales / Working Capital
Sales =1,25,000

Working capital = 1,40,000 – 65,000 = 75,000

WCTR = 1,25,000 / 75,000
= 1.67 times

- Working Capital = Current Assets – Current Liabilities

SOLVENCY / CAPITAL STRUCTURE / LEVERAGE RATIOS

✍ **DEBT-EQUITY RATIO**

Debt Equity Ratio = Outsiders' funds / Insiders' funds
(or)
Debt Equity Ratio = Debt / Equity

= 3,35,000 / 3,00,000
= 1.11:1

Debt = 1,50,000 + 1,20,000 + 20,000 + 30,000 + 15,000
= 3,35,000

Equity = 1,26,000 + 1,50,000 + 24,000
= 3,00,000

- Outsiders Funds= Debentures, Bonds, Long term loans, current liabilities, etc.
- Insider funds= Equity & Preference Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.

✍ **INTEREST COVERAGE RATIO**:

Interest Coverage Ratio=Net Profit Before interest & Taxes (NBIT) / Fixed interest
ICR = 45,000 / 21,000
= 2.14 times

Net Profit before Interest & Taxes (NBIT) = 24,000 + (15,000 + 6,000)
= 45,000

Fixed Interest = 15,000 + 6,000
= 21,000

Interest on Debentures = (1,50,000 x 10) /100
= 15,000

Interest on long term loan = (1,20,000 x 5) /100
=6,000

- Net Profit before Interest & Tax = Net profit After Tax + Tax + Interest on debentures or Long Term loans
- Fixed Interest charges = Interest on debentures or long term loans

✍ **PROPRIETARY RATIO / PROPRIETORS' FUNDS TO TOTAL ASSETS RATIO:**

Proprietary Ratio = (Owners' funds / Total Assets) x 100
PR = (3,00,000 / 5,95,000) x 100
= 50.42%

Owners funds = 1,26,000 + 1,50,000 + 24,000
= 3,00,000

Total Assets = 1,40,000 + 4,55,000 = 5,95,000

Current assets = 30,000 + 10,000 + 45,000 + 40,000 + 15,000
= 1,40,000

Fixed assets = 3,50,000 + 1,05,000
= 4,55,000

- Owners' funds= Equity & Preference Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.

- Total Assets = Current Assets + Fixed Assets (except Intangible assets)

✍ NET WORTH TO DEBT RATIO

Net worth to Debt Ratio = Net worth / Debt
= 3,00,000 / 3,35,000
=1:1.11

Net worth = 1,26,000 + 1,50,000 + 24,000
= 3,00,000

Debt = 1,50,000 + 1,20,000 + 20,000 + 30,000 + 15,000
= 3,35,000

- Debt= Debentures, Bonds, Long term loans & Loans from others, current liabilities.

- Net worth= Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.

✍ FIXED ASSETS TO PROPRIETORS' FUNDS RATIO

Fixed Assets to Proprietors' Funds Ratio = Fixed Assets / Proprietors' funds x 100
= (4,55,000 / 3,00,000) x 100
= 151.67%

Fixed assets = 3,50,000 + 1,05,000
= 4,55,000

Proprietor's funds = 1,26,000 + 1,50,000 + 24,000
= 3,00,000

- Proprietors' funds= Equity & Preference Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.

- Fixed Assets = Land, Building, Plant, Machinery, Furniture, etc.

✍ CURRENT ASSETS TO PROPRIETORS' FUNDS RATIO:

Current assets to Proprietors' Funds Ratio = Current Assets / Proprietors' funds x 100
= 1,40,000 / 3,00,000 x 100
= 46.67%

Current assets = 30,000 + 10,000 + 45,000 + 40,000 + 15,000
= 1,40,000

Proprietor's funds = 1,26,000 + 1,50,000 + 24,000
=3,00,000

- Proprietors' funds: Equity & Preference Share capital, Reserves & Surplus, Retained Earnings, Net profit, etc.
- Current Assets = Closing Stock (stock), Debtors, Bills Receivable, Cash at bank, Cash in hand, Prepaid expenses, Income yet to be received, etc.

✍ INVENTORY TO WORKING CAPITAL RATIO

Inventory to Working Capital Ratio = Inventory / Working Capital
= 40,000 / 75,000
= 0.53:1

Inventory = 40,000

Working capital = 1,40,000 – 65,000
= 75,000

Current assets = 30,000 + 10,000 + 45,000 + 40,000 + 15,000
= 1,40,000

Current liabilities = 20,000 + 30,000 + 15,000
= 65,000

- Working Capital = Current Assets – Current Liabilities

PROFITABILITY RATIO

✍ GROSS PROFIT RATIO:

Gross Profit Ratio = (Gross Profit / Net Sales) x 100
= (45,0000 / 1,25000) x 100
= 36%

Gross profit = 45,000
Net Sales = 1,25,000

- Gross Profit = Net Sales – Cost of goods sold
- Net Sales = Sales – Sales Returns

✍ NET PROFIT RATIO:

Net Profit Ratio = (Net profit after taxes / Net sales) x 100
= 24,000 / 1,25,000
= 19.2%

Net profit after taxes = 24,000

Net Sales = 1,25,000

✍ OPERATING RATIO:

Operating Ratio = (Operating Expenses / Net sales) x 100
= (1,01,000 / 1,25,000) x100
= 80.8%

Cost of goods sold = Sales – Gross profit
= 1,25,000 – 45,000
= 80,000

Operating expenses = Gross profit – Net profit
= 45,000 – 24,000
= 21,000

Total operating expenses = 80,000 + 21,000
= 1,01,000

Net sales = 1,25,000

Operating Expenses= Cost of goods sold + Administrative expenses
+ Office expenses + Selling & Distribution Expenses.

Net Sales = Sales – Sales Returns

✍ EARNINGS PER SHARE

EPS = Net Profit after Taxes / No. of Shares outstanding
= 24,000 / 10,000
=Rs.2.40 per share

Net Profit after Taxes = 24,000

No. of Shares outstanding = 10,000 shares

✍ **PRICE/ EARNINGS RATIO**

Price/ Earnings Ratio = Market price per share / Earnings Per share
= 15 / 2.40
= 6.25

Market price per share = Rs. 15 per share

Earnings Per share = Rs. 2.40 per share

✍ **RETURN ON INVESTMENT (ROI)**

ROI = Net Profit after taxes / Total Investment (owners' equity)
= 24,000 / 3,00,000
= 0.08 (8%)

Net Profit after taxes = 24,000

Total Investment = 1,26,000 + 1,50,000 + 24,000
= 3,00,000

✍ **RETURN ON EQUITY (ROE)**

ROE = (Net Profits – Dividends payable to Pref. shareholders) / Equity share capital
= (24,000 – 0) / 1,50,000
= 0.16 (16%)

Net profit = 24,000

Dividends payable to Preference shareholders = 0

Equity share capital = 1,50,000

✍ **RETURN ON CAPITAL EMPLOYED (ROCE)**

ROCE = Net Profit after taxes / Capital Employed
= 24,000 / 5,70,000
= 0.042 (4%)

Net Profit after taxes = 24,000

Capital Employed = 1,26,000 + 1,50,000 + 24,000 +
1,50,000 + 1,20,000
= 5,70,000

Capital Employed = Share capital, debentures, reserves & surplus, retained earnings, etc.

✍ RETURN ON TOTAL ASSETS (ROTA)

ROTA = Operating profits / Total assets
= 24,000 / 5,95,000
= 0.04 (4%)

Operating profits = 24,000 – 0
= 24,000

Total assets = 30,000 + 10,000 + 45,000 + 40,000 + 15,000
+ 3,50,000 + 1,05,000
= 5,95,000

- Operating Profits = Net profit – Profit on sale of assets
- Total Assets = current assets + fixed assets

Illustraion-02:
Following is the Balance Sheet of XYZ company as on 31st Dec 2019

Liabilities	Rs.	Assets	Rs.
Equity share capital	20,000	Goodwill	12,000
Capital Reserve	10,000	Fixed assets	28,000
8% loan on Mortgage	16,000	Stocks	6,000
Trade Creditors	8,000	Debtors	6,000
Bank overdraft	6,000	Investments	2,000
		Cash in hand	6,000
	60,000		60,000

Calculate Ratios for:
(a) Testing liquidity, and
(b) Solvency of the Company.

Solution:

LIQUIDITY RATIO

✍ CURRENT RATIO

Current Ratio = Current Assets / Current Liabilities
= 20,000 / 14,000
= 1.43:1

Current assets = 6,000 + 6,000 + 2,000 + 6,000
= 20,000

Current liabilities = 8,000 + 6,000
= 14,000

✍ QUICK OR ACID TEST RATIO

Quick ratio = Quick Assets / Current Liabilities
= 14,000 / 14,000
= 1:1

Quick Assets = current assets – (closing stock & prepaid expenses)
= 20,000 – (6,000 +0) = 14,000

Current liabilities = 8,000 + 6,000 = 14,000

✍ LIQUID RATIO

Liquid Ratio = Liquid assets / Current Liabilities
= 6,000 / 14,000
= 0.43:1

Liquid assets = 6,000

Current liabilities = 8,000 + 6,000 = 14,000

SOLVENCY / CAPITAL STRUCTURE / LEVERAGE RATIOS

✍ DEBT-EQUITY RATIO

Debt Equity Ratio = Outsiders' funds / Insiders' funds
(or)
Debt Equity Ratio = Debt / Equity
= 30,000 / 30,000
= 1:1

Debt = 16,000 + 8,000 + 6,000 = 30,000

Equity = 20,000 + 10,000 = 30,000

✍ PROPRIETARY RATIO

Proprietary Ratio = (Owners' funds / Total Assets) x 100
= 30,000 / 60,000 x 100
= 0.5 (50%)

Owners' funds = 20,000 + 10,000 = 30,000

Total Assets = 60,000

✍ NET WORTH TO DEBT RATIO:

Net worth to Debt Ratio = Net worth / Debt
= 30,000 / 30,000
= 1:1

Net worth = 20,000 + 10,000 = 30,000

Debt = 16,000 + 8,000 + 6,000 = 30,000

✍ FIXED ASSETS TO PROPRIETORS' FUNDS RATIO

Fixed Assets to Proprietors' Funds Ratio = (Fixed Assets / Proprietors' funds) x 100
= 28,000 / 30,000 x100
= 0.93 (93%)

Fixed Assets = 28,000

Proprietors' funds = 20,000 + 10,000
= 30,000

✍ CURRENT ASSETS TO PROPRIETORS' FUNDS RATIO

Current Assets to Proprietors' Funds Ratio = (Current Assets / Proprietors' funds) x 100
= 20,000 / 30,000 x100
= 0.67 (67%)

Current Assets = 6,000 + 6,000 + 2,000 + 6,000
= 20,000

Proprietors' funds = 20,000 + 10,000
= 30,000

✍ INVENTORY TO WORKING CAPITAL RATIO

Inventory to Working Capital Ratio = Inventory / Working Capital
= 6,000 / 6,000
= 1:1

Inventory = 6,000

Working Capital = 20,000 – 14,000 = 6,000

Current Assets = 6,000 + 6,000 + 2,000 + 6,000 = 20,000

Current liabilities = 8,000 + 6,000 = 14,000

Illustration-03

The following are the extracts from the financial statements of Blue and Red Ltd.; as on 31st March 2019 and 2020 respectively.

	2019	2020
	Rs.	Rs.
Stock	10,000	25,000
Debtors	20,000	20,000
Bills Receivables	10,000	5,000
Cash in Hand	18,000	15,000
Bills payable	15,000	20,000
Bank overdraft	2,000	
9% Debentures	5,00,000	5,00,000
Sales for the year	3,50,000	3,00,000
Gross profit	70,000	50,000

Compute for both the years the following:

(a) Current Ratio
(b) Acid test Ratio
(c) Stock Turnover Ratio

Solution:

✍ **CURRENT RATIO**

Current Ratio = Current Assets / Current Liabilities

2019

Current assets = 10,000 + 20,000 + 10,000 + 18,000
= 58,000

Current liabilities = 15,000

CR = 58,000 / 15,000
= 3.87:1

2020

Current assets = 25,000 + 20,000 + 5,000 + 15,000
= 65,000

Current liabilities = 20,000 + 2,000
= 22,000

CR = 65,000 / 22,000
= 2.95:1

✍ QUICK OR ACID TEST RATIO

Acid Test ratio = Current assets – (Prepaid expenses + Closing stock) / Current Liabilities

2019

Quick assets = Current assets – (Prepaid expenses + Closing stock)
= 58,000 – 10,000
= 48,000

Current liabilities = 15,000

QR = 48,000 / 15,000
= 3.2:1

2020

Quick assets = Current assets – (Prepaid expenses + Closing stock)
= 65,000 – 25,000
= 40,000

Current liabilities = 20,000 + 2,000
= 22,000

QR = 40,000 / 22,000
= 1.82:1

✍ INVENTORY TURNOVER RATIO

Stock Turnover Ratio = Cost of Goods Sold / Average Inventory

2019

Cost of Goods Sold = Sales – Gross profit
= 3,50,000 – 70,000
= 2,80,000

Average Inventory = (opening stock + closing stock) / 2
= 10,000

STR = 2,80,000 / 10,000
= 28 times

2020

Cost of Goods Sold = Sales – Gross profit
= 3,00,000 – 50,000
= 2,50,000

Average Inventory = (opening stock + closing stock) / 2
= 25,000

STR = 2,50,000 / 25,000
= 10 times

Illustration-04:

Calculate the ratios of Liquidity, Activity, Solvency and Profitability from the following set of financial statements of ABC Co. Ltd.

Profit and Loss Account for the year ended 30-03-2019

Items	Amount
Net Sales	28,00,000
Less: Cost of goods sold	25,48,000
Gross Profit	**2,52,000**
Less: Operating expenses	57,000
Net operating profit	**1,95,000**
Add: Non-operating income	
Interest on Government securities	39,000
Earnings before interest and taxes (EBIT)	**2,34,000**
Less: Interest	27,000
Net Income before tax	**2,07,000**
Less: Income tax @ 50%	1,03,500
Net Income after tax	**1,03,500**

Balance Sheet as on 30-03-2019

Liabilities	Amount	Assets	Amount
Equity shares of Rs.10 each	260000	Plant and Machinery	721500
15% Debentures	120000	Motor Vehicles	78500
Profit and Loss A/c	181500	Stock	90000
Reserve fund	236500	Sundry Debtors	60000
Creditors	36000	Short-term investments	5000
Bank Overdraft	60000	Cash at bank	5500
Rent outstanding	6000	Cash in hand	50000
	900000		**900000**

Additional Information:

1. Half of the Net Sales are credit sales.
2. Opening balance of debtors Rs.30,000.
3. Average inventory during the year was Rs.3,00,000.

Liquidity Ratios:

1. Current Ratio = Current Assets/Current Liabilities
   = 2,10,500 / 1,02,000
   = 2.06:1

   Current assets = 90,000 + 60,000 + 5,000 + 5,500 + 50,000
   = 2,10,500

   Current liabilities = 36,000 + 60,000 + 6,000
   = 1,02,000

2. Quick Ratio = Quick Assets/Current Liabilities
   = 1,20,500 / 1,02,000
   = 1.18:1

   Quick Assets = 2,10,500 – 90,000
   = 1,20,500

   Current liabilities = 36,000 + 60,000 + 6,000
   = 1,02,000

3. Liquid Ratio = Liquid Assets / Current Liabilities
   = 55,500 / 1,02,000
   = 0.54:1

   Liquid Assets = 5,500 + 50,000
   = 55,500

   Current liabilities = 36,000 + 60,000 + 6,000 = 1,02,000

Activity Ratio:

1. Stock Turnover Ratio = Cost of Goods Sold/Average Inventory
   = 25,48,000 / 3,00,000
   = 8.49 times

   Cost of goods sold = 25,48,000

   Average inventory = 3,00,000

2. Debtors Turnover Ratio = Credit Sales / Average Debtors
   = 14,00,000 / 45,000
   = 31.11 times

   Credit sales = 28,00,000 / 2
   = 14,00,000

   Average debtors = (opening debtors + closing debtors) / 2
   = (30,000 + 60,000) / 2
   = 45,000

   Debt collection period = 365 days / DTR
   = 365 / 31.11
   = 11.7 days

3. Working Capital Turnover Ratio = Sales / Working Capital
   = 28,00,000 / 1,08,500
   = 25.81 times

   Sales = 28,00,000

   Working capital = 2,10,500 – 1,02,000
   = 1,08,500

   Current assets = 90,000 + 60,000 + 5,000 + 5,500 + 50,000
   = 2,10,500

   Current liabilities = 36,000 + 60,000 + 6,000
   = 1,02,000

Solvency Ratios:

1. Debt-Equity Ratio = Debt / Equity
   = 2,22,000 / 6,78,000
   = 0.33:1

   Debt = 1,20,000 + 36,000 + 60,000 + 6,000
   = 2,22,000

   Equity = 2,60,000 + 1,81,500 + 2,36,500
   = 6,78,000

2. Interest Coverage Ratio = Net Profit before interest and taxes / Fixed Interest
   = 2,34,000 / 27,000
   = 8.67 times

   Net Profit before interest and taxes = 2,34,000

   Fixed Interest = 27,000

3. Proprietary Ratio = Proprietor's funds / Total Assets
   = (6,78,000 / 9,00,000) x 100
   = 0.75 (75%)

   Proprietor's funds = 2,60,000 + 1,81,500 + 2,36,500
   = 6,78,000

   Total Assets = 9,00,000

4. Net worth to Debt Ratio = Net worth / Debt
   = 6,78,000 / 2,22,000
   = 3.05:1

   Net worth = 2,60,000 + 1,81,500 + 2,36,500
   = 6,78,000

   Debt = 1,20,000 + 36,000 + 60,000 + 6,000
   = 2,22,000

5. Fixed Assets to Proprietors' Funds Ratio = Fixed Assets / Proprietors' funds
   = 6,89,500 / 6,78,000
   = 1.02:1

   Fixed assets = 6,11,000 + 78,500
   = 6,89,500
   Proprietors' funds = 2,60,000 + 1,81,500 + 2,36,500
   = 6,78,000

6. Current Assets to Proprietors' Funds Ratio = Current Assets / Proprietors' funds
   = 2,10,500 / 6,78,000
   = 0.31:1

   Current assets = 90,000 + 60,000 + 5,000 + 5,500 + 50,000
   = 2,10,500

   Proprietors' funds = 2,60,000 + 1,81,500 + 2,36,500
   = 6,78,000

7. Inventory to Working Capital Ratio = Inventory / Working Capital
   = 90,000 / 1,08,500
   = 0.83:1

   Inventory = 90,000

   Working capital = current assets – current liabilities
   = 2,10,500 – 1,02,000
   = 1,08,500

   Current assets = 90,000 + 60,000 + 5,000 + 5,500 + 50,000
   = 2,10,500

   Current liabilities = 36,000 + 60,000 + 6000
   = 1,02,000

Profitability Ratio:

1. Gross Profit Ratio = Gross Profit / Net Sales *100
   = (2,52,000 / 28,00,000) x100
   = 9%

   Gross profit = 2,52,000
   Net sales = 28,00,000

2. Net Profit Ratio = Net Profit after taxes/Net Sales *100
   = (1,03,500 / 28,00,000) x 100
   = 3.6%

   Net Profit after taxes = 1,03,500
   Net sales = 28,00,000

3. Operating Ratio = Operating Expenses / Net sales * 100
   = (57,000 / 28,00,000) x 100
   = 2.03 %

   Operating Expenses = 57,000
   Net sales = 28,00,000

4. Earnings Per Share = Net profit after taxes / Number of shares
   = 1,03,500 / 26,000
   = Rs. 3.98 per share

   Net Profit after taxes = 1,03,500

   Number of shares = 2,60,000 / 10
   = 26,000 shares

5. Price/Earnings Ratio = Market price per share / Earnings Per Share
   = 10 / 3.98
   = 2.51

   Market price per share = Rs. 10

   Earnings per Share = Rs. 3.98 per share

6. Return on Investment = Net Profit after taxes / Total Investment *100
   = (1,03,500 / 6,78,000) x 100
   = 15.26%

   Net Profit after taxes = 1,03,500

   Total Investment = 2,60,000 + 1,81,500 + 2,36,500
   = 6,78,000

7. Return on Equity (ROE) =
   (Net Profit after taxes – preference share dividend / Equity share capital) *100
   = 1,03,500 / 2,60,000
   = 39.8%

   Net Profit after taxes = 1,03,500
   Preference share dividend = 0

   Equity share capital = 2,60,000

8. Return on Capital employed = Net Profit after taxes / Capital employed *100
   = (1,03,500 / 7,98,000) x 100
   = 13% (12.97%)

   Net Profit after taxes = 1,03,500
   Capital employed = 2,60,000 + 1,20,000 + 1,81,500 + 2,36,500
   = 7,98,000

9. Return on Total Assets = Net Profit after taxes / Total assets *100
   = 1,03,500 / 9,00,000 x 100
   = 11.5%

   Net Profit after taxes = 1,03,500
   Total assets = 9,00,000

Illustration-05:

a) From the following information, calculate

i. Debt-Equity ratio ii. Current ratio

Liabilities	Rs.	Assets	Rs.
Debentures	1,40,000	Stock	30,000
Long term Loans	70,000	Sundry Debtors	70,000
General reserve	40,000	Fixed Assets	3,50,000
Creditors	66,000		
Bills payable	14,000		
Share capital	1,20,000		
	4,50,000		4,50,000

Solution:

i) Debt equity ratio = Debt / Equity

Debt = 1,40,000 + 70,000 + 66,000 + 14,000
= 2,90,000

Equity = 40,000 + 1,20,000
= 1,60,000

DER = 2,90,000 / 1,60,000
= 1.81:1

ii) Current ratio = Current assets / Current liabilities

Current assets = 30,000 + 70,000
= 1,00,000

Current liabilities = 66,000+14,000
= 80,000

CR = 1,00,000 / 80,000 = 1.25:1

b) Calculate interest coverage ratio from the following information

	Rs.
Net profit after deducting interest and taxes	6,00,000
12% Debentures of the face value of	15,00,000
Amount provided towards taxation	1,20,000

Interest Coverage Ratio = Net profit before interest and taxes (NPBIT) / Fixed interest

NPBIT = Net profit after interest and taxes + tax + interest on long term debts
= 6,00,000 + 1,20,000 + 1,80,000
= 9,00,000

Interest on debentures = 15,00,000 * 12/100
= 1,80,000

Fixed interest = interest on long term debts or debentures
= 1,80,000

ICR = 9,00,000 / 1,80,000
= 5 times

Illustration-06:
Calculate Earnings per share

	Rs.
Net profit before preferential dividend	1,15,000
Equity share capital (40,000 shares of Rs.100 each)	4,00,000
12½% Preference share capital	2,00,000

Solution:
Earnings per share = (Net profit after taxes & preference dividend) / No. of shares outstanding

Net profit after taxes = 1,15,000 - (2,00,000 * 12.5/100)
= 1,15,000 – 25,000
= 90,000

No. of shares outstanding = 40,000 shares

EPS = 90,000 / 40,000
= Rs. 2.25 per share

Price/Earnings Ratio = Market price per share / EPS

= 100 / 2.25
= 44.4

Illustration-07:
With the help of the following information complete the Balance Sheet of PKJ Ltd.

Equity share capital	Rs. 1,00,000
The relevant ratios of the company are as follows:	
Current debt to total debt	40
Total debt to owner 's equity	60
Fixed assets to owner 's equity	60
Total assets turnover	2 Times
Inventory turnover	8 Times

Solution:

1. **Fixed assets**
   Fixed assets to owner's equity = Fixed assets / owner 's equity * 100
   0.60 = FA / 1,00,000
   FA = 0.60 x 1,00,000
   FA = Rs. 60,000

2. **Total debt**
   Total debt to ow ner 's equity = Total debt / owner 's equity * 100
   0.60 = D / 1,00,000
   D = 0.60 x 1,00,000
   D = Rs. 60,000

3. Total assets consisting of fixed assets and current assets must be equal to Rs. 1,60,000 (Assets = Liabilities + Equity)
   Since fixed assets are Rs. 60,000
   Hence, current assets should be Rs. 1,00,000

4. Total equity = Total debt + Equity = 60,000 + 1,00,000 = Rs.1,60,000

5. Total assets turnover = 2 Times
   Inventory turnover = 8 Times
   Therefore, Inventory/Total assets = 2/8 = 1/4
   Total assets = Rs. 1,60,000
   Therefore, Inventory = 1,60,000 / 4 = 40,000

6. Cash = 1,00,000 – 40,000 = Rs. 60,000

7. Current debt to total debt = Curren tdebt / total debt * 100
   0.40 = CD / 60,000
   CD = 60,000 * 0.40
   CD = Rs. 24,000

Total debt = 60,000
Current debt = 24,000
Long term debt= 36,000

Balance Sheet of PKJ Ltd.

Liabilities	Amount	Assets	Amount
Equity share capital	1,00,000	Fixed Assets	60,000
Long term debts	36,000	Cash	60,000
Current Assets	24,000	Stock	40,000
	1,60,000		1,60,000

Illustration-08:

From the following Balances as on the date March 31st 2020

Liabilities	Amount (in Rs.)	Assets	Amount (in Rs.)
12% debentures	2,00,000	Bank at Cash	10,000
8% Long term loan	1,50,000	Cash in hand	20,000
Preference share capital	2,50,000	Debtors	10,000
Bank overdraft	50,000	Opening stock	50,000
Creditors	1,00,000	Closing stock	40,000
Bills payable	50,000	Gross profit	20,000
Sales	95,000	Buildings	5,00,000
		Land & Machinery	2,05,000
Total	8,45,000	Total	8,45,000

Calculate the Ratios:

i) Current Ratio
ii) Debt-Equity Ratio
iii) Inventory turnover Ratio
iv) Quick Ratio
v) Debtors turnover Ratio
vi) Liquidity Ratio

Solution:

i) Current Ratio = Current Assets / Current Liabilities
= 80000 / 200000
= 0.4:1
Current Assets = 10000 + 20000 + 10000 + 40000 = 80000
Current Liabilities = 50000 + 100000 + 50000 = 200000

ii) Debt-Equity Ratio = outsiders funds / shareholders funds
= 550000 / 250000
= 2.2:1
Outsiders funds = 200000 + 150000+ 50000 + 100000 + 50000 = 550000
Shareholders funds = 250000

iii) Inventory Turnover Ratio = cost of goods sold / Average stock
= 75000 / 45000
= 1.66 times
Cost of goods sold = sales – gross profit
= 95000 – 20000 = 75000
Average stock = opening stock + closing stock / 2
= 50000 + 40000 / 2 = 45000

iv) Quick Ratio = Quick assets / current liabilities
= 40000 / 200000
= 0.2:1
Quick assets = 10000 + 20000 + 10000 = 40000
Current Liabilities = 50000 + 100000 + 50000 = 200000

v) Debtors Turnover Ratio = Credit sales / Average Debtors
= 95000 / 10000
= 9.5 times

vi) Liquidity Ratio = Liquid Assets / Current liabilities
= 30000 / 200000
= 0.15:1
Liquid Assets = 10000 + 20000 = 30000

9. The following is the balance sheet of ABC Company as on 31st March 2020

Liabilities	Amount (in Rs.)	Assets	Amount (in Rs.)
Share capital	2,00,000	Land & Buildings	1,40,000
Profit & Loss account	30,000	Plant & Machinery	3,50,000
General Reserve	40,000	Stock	2,00,000
12% Debentures	4,20,000	Sundry Debtors	1,00,000
Sundry creditors	1,00,000	Bills Receivable	10,000
Bills Payable	50,000	Cash at Bank	40,000
Total	**8,40,000**	**Total**	**8,40,000**

Calculate:

i. Current Ratio
ii. Quick Ratio
iii. Inventory to working capital
iv. Debt equity ratio
v. Current assets to fixed assets Ratio
vi. Proprietary Ratio

Solution:

1. Current Ratio = Current Assets / Current Liabilities
   = 350000 / 150000
   = 2.33:1
   Current Assets = 200000 + 100000 + 10000 + 40000 = 350000
   Current Liabilities = 100000 + 50000 = 150000

2. Quick Ratio = Quick Assets / Current Liabilities
   = 150000 / 150000 = 1:1
   Quick Assets = 100000 + 10000 + 40000 = 150000
   Current Liabilities = 100000 + 50000 = 150000

3. Inventory to Working Capital Ratio = Inventory / Working Capital
   = 200000 / 200000
   = 1:1
   Inventory (Stock) = 200000
   Working Capital = Current Assets – Current Liabilities
   = 350000 – 150000 = 200000
4. Debt-Equity Ratio = Outsiders funds / Shareholders funds
   = 570000 / 270000
   = 2.11:1
   Outsiders funds = 420000 + 100000 + 50000 = 570000
   Shareholders' funds = 200000 + 30000 + 40000 = 270000

5. Current assets to fixed assets Ratio = Current Assets / Fixed Assets
   = 350000 / 490000 = 0.71:1

Current Assets = 200000 + 100000 + 10000 + 40000 = 350000
Fixed Assets = 140000 + 350000 = 490000

6. Proprietary Ratio = Proprietors funds / Total Assets
= 270000 / 840000
= 0.32:1
Proprietors funds = 200000 + 30000 + 40000 = 270000
Total Assets = 840000

10. From the following Information, Calculate:
1. Gross Profit Ratio
2. Net Profit Ratio
3. Inventory Turnover Ratio
4. Working capital turnover Ratio
5. Net worth to debt ratio
6. Return on total assets Ratio

Particulars	**Amount (in Rs.)**
Sales	25,20,000
Cost of Sales	19,20,000
Net Profit	3,60,000
Inventory	8,00,000
Other Current Assets	7,60,000
Fixed Assets	14,40,000
Net worth	15,00,000
Debt	19,00,000
Current Liabilities	6,00,000

Solution:

1. Gross Profit Ratio = Gross Profit / Sales x 100
= 600000 / 2520000 x 100
= 23.80%
Gross Profit = Sales – Cost of sales
= 25,20,000 – 19,20,000 = 6,00,000

2. Net Profit Ratio = Net Profit / Sales x 100
= 360000 / 2520000 x 100
= 14.28%

3. Inventory Turnover Ratio = Cost of Sales / Average Stock
= 1920000 / 800000
= 2.4 times

4. Working capital turnover Ratio = Sales / Working Capital
= 2520000 / 1600000
= 15.75 times
Working Capital = 760000 – 600000 = 160000

5. Net worth to Debt ratio = Net worth / Debt
   = 1500000 / 1900000
   = 0.79:1

6. Return on total assets Ratio = Operating Profit / Total Assets x 100
   = 360000 / 2200000 x 100
   = 16.36%

   Operating Profit = 360000
   Total Assets = 1440000 + 760000 = 2200000

IMPORTANT QUESTIONS

1. What are financial statements? Explain the nature of financial statements.
2. Discuss the objectives and importance of financial statements.
3. Explain the limitations of financial statements.
4. Explain the purpose of preparing the following accounts/statements and also elaborate the various items that appear in each of them.
   a) Trading Account
   b) Profit & Loss Account
   c) Balance Sheet
5. What are the important ratios? Explain any four of them with examples to understand the financial statements?
6. How are ratios classified for the purpose of financial analysis? With assumed data, illustrate any two types of ratios under each category?
7. What are the limitations of Ratio Analysis? Does ratio analysis really measure the financial performance of a company?

8. The following are the closing balances extracted from the books of Bhargav for the year ending 31st December 2019 with the help of which prepare Trading Account, Profit and Loss A/c and Balance Sheet.

Debit balances	**Rs.**	**Credit Balances**	**Rs.**
Opening stock	6,050	Sales	13,720
Purchases	9,030	Purchases returns	130
Carriage	220	Capital	3,000
Drawings	450	Creditors	4,500
Investments	3,800	Discounts received	350
Debtors	2,500	Mortgage loan	4,000
Cash	1,350		
Printing charges	1,200		
Wages	1,100		
	25,700		**25,700**

Adjustments:

(a) Closing stock was valued at Rs.16,000
(b) Wages outstanding by Rs.900
(c) Outstanding discounts receivable Rs.150
(d) Write off bad debts Rs. 500
(e) Create a Reserve for Bad and doubtful debts Rs.500.

9. The following is the Trial Balance of Abhiram, was prepared on 31st March 2020. Prepare Trading and Profit& Loss Account and Balance Sheet.

	Debit Rs.	Credit Rs.
Capital	------	22000
Opening stock	10000	------
Debtors and Creditors	8000	12000
Machinery	20000	-------
Cash at Bank	2000	-------
Bank overdraft	------	14000
Sales returns and Purchases returns	4000	8000
Trade expenses	12000	-------
Purchases and Sales	26000	44000
Wages	10000	-------
Salaries	12000	-------
Bills payable	-------	10600
Bank deposits	6600	-------
TOTAL	110600	110600

Adjustments:

- Closing Stock was valued at Rs.60,000
- Provide bad debts Rs. 500
- Prepaid wages Rs.200
- Outstanding salaries Rs.100
- Depreciate Machinery at 10%

10. Prepare Trading and Profit & Loss A/C for the year ended 31.12.2019 and a Balance Sheet as on that date from the following Trial Balance.

	Debit Rs.	Credit Rs.
Purchases	45000	
Debtors	60000	
Interest earned		1200
Salaries	9000	
Sales		96300
Purchase returns		1500
Wages	6000	
Rent	4500	
Sales returns	3000	
Bad debts return off	2100	
Creditors		36600
Capital		31800
Drawings	7200	
Printing and stationary	2400	
Insurance	3600	
Opening stock	15000	

Office expenses	3600	
Furniture and fittings	6000	
GRAND TOTAL	167400	167400

Adjust the following:

a) Closing stock Rs.20000
b) Write off furniture @ 15% per annum.
c) Provide provision for bad debts at 5%

11. Following is the Profit and Loss account and Balance Sheet of Jai Hind Ltd. Calculate the following ratios:
    a) Gross Profit Ratio b) Current Ratio c) Quick ratio

Profit and Loss Account

Particulars	Rs.	Particulars	Rs.
To Opening Stock of		By Sales	800000
Finished goods	100000		
Raw materials	50000	By Closing Stock:	
To Purchase of raw material	300000	Raw Material	150000
To Manufacturing Expenses	100000	Finished goods	100000
To Administration Expenses	50000	By Profit on sale of shares	50000
To Selling& Distribution Exp	50000		
To Loss on sale of Plant	55000		
To Interest on Debentures	10000		
To Net Profit	385000		
	1100000		1100000

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Share Capital:		Fixed Assets	250000
Equity Share Capital	100000	Stock of Raw Materials	150000
Preference share Capital	100000	Stock of finished goods	100000
Reserves	100000	Sundry Debtors	100000
Debentures	200000	Bank balance	50000
Sundry creditors	100000		
Bills payable	50000		
	650000		650000

12. Compute the following ratios.
    a) Calculate Debtors Turnover Ratio

Total sales for the year	Rs.1,75,000
Cash sales 25% of total sales	
Sales returns out of credit sales	Rs. 10,000
Sundry Debtors-Opening balance	Rs. 8,000
Sundry Debtors-Closing balance	Rs.12,000

b) Calculate interest coverage ratio

	Rs.
Net profit after deducting interest and taxes	6,00,000
12% Debentures of the face value of	15,00,000
Amount provided towards taxation	1,20,000

13. From the information given below calculate:
    a) Inventory turnover ratio (Stock)
    b) Receivables Turnover ratio (Debtors)

	(Amount in Lakhs of Rs.)
Sales (100% credit)	42.00
Opening stock	6.00
Closing stock	7.00
Sales returns	3.00
Opening Balance of Sundry debtors	6.00
Closing Balance of Sundry debtors	4.00
Opening Balance of Bills Receivables	3.00
Closing Balance of Bills Receivables	5.00
Gross profit= 30% of Sales	

14. From the following extract of a balance sheet of an Airlines company calculate the debt equity ratio and interest coverage ratio. Given that the Debt-Equity ratio is in the range of 10:1, how do you interpret this ratio?

50,000, 10% Preference shares of	Rs. 100 each
2, 00,000 equity shares of	Rs. 10 each
10%, 30,000 Debentures of	Rs. 100 each
Net profit during the year was	Rs. 10, 00,000

15. The following are the extracts from the financial statements of Blue and Red Ltd.; as on 31st March 2015 and 2016 respectively.

	31. March 2015	31. March 2016
	Rs.	Rs.
Stock	10,000	25,000
Debtors	20,000	20,000
Bills Receivables	10,000	5,000
Cash in Hand	18,000	15,000
Bills payable	15,000	20,000
Bank overdraft		2,000
9% Debentures	5, 00,000	5, 00,000
Sales for the year	3, 50,000	3, 00,000
Gross profit	70,000	50,000

Compute for both the years the following:
(a) Current Ratio (b) Acid Ratio
(c) Stock Turnover Ratio. Also interpret the results.

16. a) ABC Ltd has the following information:

Cash = Rs.4,000 Debtors= Rs.4,000

Inventory = Rs.24,000 Current Liabilities = Rs.16,000

Determine the current ratio and acid-test ratio.

b) A company has sold products worth Rs.6, 00,000 with a gross profit margin of 20%. The inventory at the beginning of the year is Rs.30, 000 and at the end of the year is Rs. 50,000. Determine the inventory turnover ratio and inventory holding Period.

17. Following is the Balance Sheet of XYZ company as on 31st Dec 2016

Liabilities	Rs.	Assets	Rs.
Equity share capital	20,000	Goodwill	12,000
Capital Reserve	10,000	Fixed assets	28,000
8% loan on Mortgage	16,000	Stocks	6,000
Trade Creditors	8,000	Debtors	6,000
Bank overdraft	6,000	Investments	2,000
		Cash in hand	6,000
	60,000		60,000

Sales amounted to Rs. 1, 20,000. Calculate Ratios for

(a) Testing liquidity, and

(b) Solvency of the Company.

18. From the following balances, as on the date March 31st 2016.

Opening stock	Rs. 40,000	Purchases	Rs. 30,000
Sales	Rs. 50,000	Gross profit	Rs. 5,500
Manufacturing expenses	Rs. 5,000	Office expenses	Rs. 4,000
Selling expenses	Rs. 2,500	Closing stock	Rs. 30,000

Preference dividend Rs. 25,000

15,000 Equity shares @ Rs.25 market price

Calculate the Ratios:

i) Gross profit ratio

ii) Net profit ratio

iii) Operating ratio

iv) Earnings per share (EPS)

v) P/E ratio