ACCOUNTANCY

HIGHER SECONDARY – SECOND YEAR

VOLUME I

Untouchability is a Sin
Untouchability is a Crime
Untouchability is Inhuman

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PREFACE

The book on Accountancy has been written strictly in accordance with the new syllabus framed by the Directorate of School Education, Government of Tamil Nadu.

As curriculum renewal is a continuous process, Accountancy Curriculum has been improved from time to time in accordance with the changing needs of the society. The present effort of reframing and updating the curriculum in Accountancy at the Higher Secondary level is an exercise based on the feed back.

The text book for Higher Secondary - First year deals with the basic framework of accounting in all its aspects. The next step is the logical application of the subject matter in maintaining records in different forms of business enterprises.

The text books for Higher Secondary - Second year has been divided into two volumes. Volume I, the present book deals with the preparation of financial statements and their analysis. The two chapters Financial Statement Analysis - Ratio Analysis and Cash Budget are included in the new syllabus, because of its significance in the sphere of decision making in business. Volume II deals with Partnership Accounts and Company Accounts.

Each chapter starts with a simple and lucid discussion of the topic followed by properly arranged worked out illustrations and ends with theoretical questions and practical exercises.

Students are strongly advised to go through the "Reference Books" as **Questions for examinations need not be restricted to the exercises alone.**

R.Amutha
Chairperson

SYLLABUS

VOLUME I

1. Final Accounts - Adjustments *[24 Periods]*

Adjustments - Closing Stock - Outstanding Expenses - Prepaid Expenses - Accrued Incomes - Incomes received in Advance - Interest on Capital - Interest on Drawings - Interest on Loan - Interest on Investments - Depreciation - Bad Debts - Provision for Bad & Doubtful Debts - Provision for Discount on Debtors - Provision for Discount on Creditors - Preparation of Final Accounts.

2. Accounts from Incomplete Records (Single Entry)

[21 Periods]

Features of Single Entry - Limitations of Single Entry - Difference between Double Entry System and Single Entry - Distinction between Statement of Affairs and Balance Sheet - Methods of ascertaining Profit or Loss - Statement of Affairs Method - Procedure - Conversion Method - Procedure for converting Single Entry into Double Entry System - Calculation of missing figures - Ascertainment of Total Purchases - Ascertainment of Total Sales - Ascertainment of Balances of Sundry debtors and Sundry Creditors.

3. Depreciation Accounting *[14 Periods]*

Definition - Need for Providing Depreciation - Causes of Depreciation - Terms used for Depreciation - Methods of calculating Depreciation - Straight Line Method - Written Down Value Method - Annuity Method - Depreciation Fund Method - Insurance Policy Method - Revaluation Method - Recording Depreciation - Calculation of Profit or Loss on Sale of Asset.

4. Financial Statement Analysis - Ratio Analysis

[28 Periods]

Significance of Financial Statement Analysis - Limitation of Financial Statement Analysis - Ratio Analysis - Definition - Objectives - Classification of Ratios - Liquidity Ratios - Current Ratio, Liquid Ratio and Absolute Liquid Ratio - Solvency Ratios - Debt-Equity Ratio and Proprietory Ratio - Profitability Ratios - Gross Profit Ratio, Net Profit Ratio, Operating Profit Ratio and Operating Ratio - Activity Ratios - Capital Turnover Ratio, Fixed Asset Turnover Ratio, Stock Turnover Ratio, Debtors Turnover Ratio and Creditors Turnover Ratio.

5. Cash Budget *[7 Periods]*

Budget - Definition - Characteristics - Cash Budget - Advantages - Preparation of Cash Budget - Receipts and Payments Method.

VOLUME II

6. Partnership - Basic Concepts *[14 Periods]*

Definition - Features - Accounting rules applicable in the absence of Partnership Deed - Partners Capital Account - Fluctuating Capital Method - Fixed Capital Method - Difference between Fixed & Fluctuating Capital Account - Distribution of Profit - Interest on Capital - Interest on Drawings - Salary, Commission to Partner - Preparation of Profit and Loss Appropriation Account - Goodwill - Method of valuing Goodwill - Average Period Method - Super Profit Method.

7. Partnership - Admission *[28 Periods]*

Introduction - Adjustments - New Profit Sharing Ratio - Sacrificing Ratio - Calculation of New Profit Sharing Ratio and Sacrificing

Ratio - Revaluation of Assets and Liabilities - Undistributed Profit or Loss - Accumulated Reserve - Treatment of Goodwill - Revaluation Method - Capital of New Partner - Preparation of Revaluation Account, Capital Accounts and Balance Sheet after admission of Partner.

8. Partnership - Retirement of a Partner ***[19 Periods]***

Introduction - Adjustments - New Profit Sharing Ratio - Gaining Ratio - Calculation of New Profit Sharing Ratio and Gaining Ratio - Revaluation of Assets and Liabilities - Undistributed Profit or Loss - Accumulated Reserve - Treatment of Goodwill - Payment to the Retiring Partner - Preparation of Revaluation Account, Capital Accounts, Bank Account and Balance Sheet of the Reconstituted Partnership Firm.

9. Company Accounts ***[35 Periods]***

Introduction - Characteristics - Types of Share Capital - Kinds of Shares - Issue of Shares - For consideration - For cash - Issue of Shares at Par - Issue of Shares at Premium - Issue of Shares at Discount - Calls in Advance - Calls in Arrears - Forfeiture of Shares - Reissue of Forfeited Shares - Capital Reserve.

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Books for further reference:

1. T.S.Grewal – *Double Entry Book Keeping.*
2. R.L. Gupta – *Principles and Practice of Accountancy*
3. T.S.Grewal – *Introduction to Accountancy*
4. S.Kr.Paul – Accountancy Vol. I.
5. Institute of Company Secretaries of India – *Principle of Accountancy*.
6. Vinayagam, P.L.Mani, K.L.Nagarajan – *Principles of Accountancy.*
7. P.C.Tulsian, S.D.Tulsian – *Financial Accounting.*
8. Tamil Nadu Textbook Corporation – *Accountancy Higher Secondary Second Year*.
9. Jain & Narang – *Financial Accounting.*
10. R.L.Gupta, Radha Swamy – *Financial Accounting*.
11. R.K.Gupta, V.K.Gupta – *Financial Accounting*.
12. Basu Das – *Practice in Accountancy*.
13. M.C.Shukla – *Advanced Accountancy*.
14. M.C.Shukla & T.S.Grewal – *Advanced Accounts.*
15. M.P.Vittal, S.K.Sharma, S.S.Sehrawat, National Council of Educational Research and Training – *Accountancy* - *Text Book for Class XI* - Financial Accounting - Part II.
16. L.S.Porwal, R.G.Saxena, B.Banerjee, Man Mohan, N.K.Agarwal, National Council of Education, Research & Training - *Accounting* - *A Text book for Class XI* - *Part II.*
17. T.S.Grewal - *Analysis of Financial Statements*
18. Dr.R.K.Sharma, Dr.R.S.Popli - *Self Tutor, Accountancy.*
19. S.N.Maheshwari - *Principles of Management Accounting.*

Chapter -1

FINAL ACCOUNTS – ADJUSTMENTS

Learning Objectives

After studying this Chapter, you will be able to

- ➢ *understand the need for making adjustments in final accounts.*
- ➢ *know the items in respect of which adjustments are usually made in the books of account.*
- ➢ *pass necessary journal entries for different adjustments.*
- ➢ *prepare final accounts with adjustments.*

When a person starts a business he wishes to know the financial performance of his business. A convinient and universally accepted method of knowing this is to ascertain the profit or loss at yearly intervals (1^{st} April to 31^{st} March) and the financial position of the business on a given date. He can ascertain these by preparing the Final Accounts, which is prepared on the basis of the Trial Balance. The preparation of Final Accounts is the last step in the accounting cycle and that is why they are called Final Accounts.

Final Accounts include the preparation of

i) Trading and Profit and Loss Account ; and

ii) Balance sheet.

Final accounts are the means of conveying the profitability and financial position to management, owners and interested outsiders of the business. Final accounts have to be prepared every year, to make a continuous assessment of the business for a completed period. It must be kept in mind that expenses and incomes for the full accounting period are to be taken into account.

Suppose, the firm closes its books on 31st March and rent for the month of March has not been paid, this expense (rent) has been incurred and yet to be paid. Therefore, it would be proper to include the rent for the month (March) along with the rent of the year to know the true profit. In a firm there will be a number of items, both expenses and incomes, which have to be adjusted. If such items are not adjusted, the final accounts will not reveal the true and fair picture of the business performance. All such items which need to be brought into books of account at the time of preparing final accounts are called "**adjustments**". Journal entries passed to effect the required adjustments are known as **adjusting entries**.

1.1 Adjustments

Some important and common items, which need to be adjusted at the time of preparing the final accounts are discussed below.

1. Closing stock
2. Outstanding expenses
3. Prepaid Expenses
4. Accrued incomes
5. Incomes received in advance
6. Interest on capital

7. Interest on drawings
8. Interest on loan
9. Interest on investment
10. Depreciation
11. Bad Debts
12. Provision for bad and doubtful debts
13. Provision for discount on debtors
14. Provision for discount on creditors.

Note : All adjustments are given outside the trial balance.

1.1.1 Closing Stock

The unsold goods in stock at the end of the accounting period is called as closing stock. This is to be valued at cost or market price whichever is lower.

Example:

The value of closing stock shown outside the trial balance on 31.3.2004 is Rs.1,00,000.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Closing stock A/c To Trading A/c (closing stock recorded)	Dr		1,00,000	 1,00,000

Value of closing stock will appear

i) on the credit side of trading account and

ii) on the assets side of balance sheet.

Trading account for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
		By Closing Stock	1,00,000

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Assets	Rs.
		Closing Stock	1,00,000

1.1.2 Outstanding Expenses

Expenses which have been incurred but not yet paid during the accounting period for which the final accounts are being prepared are called as **outstanding expenses**.

Example: Trial balance shows salaries paid Rs.22,000. Adjustment: Salary for March 2004, Rs.2,000 not yet paid.

Adjusting Entry

Date	Particulars	L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Salaries A/c Dr To Salaries outstanding A/c (March salary outstanding)		2,000	 2,000

Outstanding expenses will be shown

i) on the debit side of Profit and Loss account by way of additions to the particular expenses and

ii) on the liabilities side of the Balance Sheet.

Profit and Loss account for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Salaries A/c	22,000				
Add: Outstanding	2,000				
		24,000			

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Assets	Rs.
Outstanding Salaries	2,000		

1.1.3 Prepaid Expenses

Expenses which have been paid in advance are called as **prepaid (unexpired) expenses**.

Example: Trial Balance for the period ending 31st March, 2004 shows Rs.15,000 as insurance premium. Adjustment: Prepaid Insurance premium Rs.7,500.

Adjusting Entry

Date	Particulars	L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Prepaid Insurance Premium A/c Dr To Insurance Premium A/c (Insurance premium paid in advance)		7,500	 7,500

Prepaid expenses will be shown

i) on the debit side of the Profit and Loss account by way of deduction from the particular expenses and

ii) on the assets side of the Balance Sheet.

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Insurance premium A/c	15,000				
Less: Prepaid	7,500				
		7,500			

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Assets	Rs.
		Prepaid Insurance premium	7,500

1.1.4 Accrued Incomes or Outstanding Incomes

Income which has been earned but not received during the accounting period is called as **accrued income**.

Example: Credit side of Trial Balance (31.3.2004) shows commission received Rs.8,000. Adjustment: Commission accrued but not yet received Rs.2,000.

Adjusting Entry

Date	Particulars	L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Accrued commission A/c Dr		2,000	
	To Commission A/c			2,000
	(commission earned but not received)			

Accrued income will be shown

i) on the credit side of Profit and Loss account by way of addition to particular income and

ii) on the assets side of the Balance Sheet

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
			By Commission received	8,000	
			Add: Accrued Comm -ission	2,000	
					10,000

Balance Sheet as on March 31, 2004

Liabilities	Rs.	Assets	Rs.
		Accrued Commission	2,000

1.1.5 Incomes Received in Advance

Income received during a particular accounting period for the work to be done in future period is called as **income received in advance**.

Example: Trial Balance for the period ending 31st March, 2004 shows Rent received Rs.25,000. Adjustment: Rent received in advance Rs.5,000.

Adjusting Entry

Date	Particulars	L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Rent received A/c Dr		5,000	
	To Rent received in advance A/c			5,000
	(rent received in advance)			

Incomes received in advance will be shown

i) on the credit side of the Profit and Loss account by way of deducting from the particular income and

ii) on the liabilities side of the Balance sheet.

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
			By Rent received	25,000	
			Less: Rent received in advance	5,000	
					20,000

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Assets	Rs.
Rent received in advance	5,000		

1.1.6 Interest on Capital

In order to see whether the business is really earning profit or not, it is desirable to charge interest on capital at a certain rate.

Example: As per Trial Balance, capital as on 31.3.2004 is Rs.4,00,000. Adjustment: Provide 6% interest on capital.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004					
Mar 31	Interest on capital A/c	Dr		24,000	
	To Capital A/c				24,000
	(6% interest on capital)				

To bring interest on capital to Profit and Loss account, the following transfer entry is required.

Transfer Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004					
Mar 31	Profit & Loss A/c	Dr		24,000	
	To Interest on Capital A/c				24,000
	(Interest on capital transferred to Profit & Loss A/c)				

Interest on capital will be shown

i) on the debit side of Profit and Loss account and

ii) on the liabilities side of the Balance Sheet by way of addition to the capital.

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Interest on Capital A/c	24,000		

Balance Sheet as on March 31, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Capital	4,00,000				
Add: Interest on capital	24,000				
		4,24,000			

1.1.7 Interest on Drawings

Amount withdrawn by the owner for his personal use is called as **drawings**. When interest on capital is allowed, then interest on drawings is charged from the owner. Interest on drawings is an income for the business and will reduce the capital of the owner.

Example: The trial balance shows the following:

	Rs.
Capital as on 31.3.2004	4,00,000
Drawings as on 31.3.2004	30,000

Adjustment : Charge interest on drawings @ 5%.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Capital A/c To Interest on Drawings A/c (Interest on drawings)	Dr		1,500	 1,500

To bring interest on drawings to Profit and Loss account the following transfer entry is required.

Transfer Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Interest on drawings A/c To Profit & Loss A/c (Interest on drawings)	Dr		1,500	 1,500

Interest on drawings will be shown

i) on the credit side of Profit and Loss account and

ii) on the liabilities side of the Balance Sheet by way of addition to the drawings which are ultimately deducted from the capital.

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
		By Interest on drawings	1,500

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Capital	4,00,000				
Less: Drawings 30,000					
Interest on drawings 1,500	31,500				
		3,68,500			

1.1.8 Interest on Loan (Outstanding)

Borrowings from banks, financial institutions and outsiders for business are called loans. Amount payable towards interest on loan is an expense for the business.

Example: The trial balance (31.3.2004) shows the following:

Bank loan @ 10% on 1.4.03	Rs. 4,00,000
Interest paid	Rs. 14,000

Adjustment: Provide for interest on bank loan outstanding.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Interest on Bank loan A/c To Interest outstanding A/c (the interest on bank loan)	Dr		26,000	 26,000

Interest on loan outstanding will be shown

i) on the debit side of the Profit and Loss account by way of addition to the appropriate interest account and

ii) on the liability side of the Balance sheet by way of addition to the particular loan account.

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Interest on loan	14,000				
Add: Interest outstanding	26,000				
		40,000			

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Bank loan @ 10%	4,00,000				
Add: Interest outstanding	26,000				
		4,26,000			

Note: Interest on Bank loan @ 10% on Rs.4,00,000 for the year

= Rs.4,00,000 x 10/100	Rs. 40,000
Less: Interest paid as per Trial balance	Rs. 14,000
Interest outstanding (Yet to be paid)	Rs. 26,000

1.1.9 Interest on Investment:

Interest receivable on investments is an income for the business.

Example: The Trial Balance (31.03.04) shows the following:

Investments @10%	Rs.	5,00,000
Interest received on investments	Rs.	40,000

Adjustment:

Provide for accrued interest on investments Rs.10,000.

Adjusting Entry

Date	Particulars	L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Accrued interest on investments A/c Dr		10,000	
	To Interest received A/c			10,000
	(Accrued interest on investments provided)			

Accrued interest on investments (outstanding interest receivable) will be shown

i) On the credit side of the Profit and Loss account by way of addition to the appropriate interest account and

ii) On the assets side of the balance sheet by way of addition to the investments account.

Profit and loss account for
the period year 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
			By Interest received	40,000	
			Add: Accrued interest	10,000	
					50,000

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Investments	5,00,00	
			Add: Accrued Interest	10,000	
					5,10,000

1.1.10 Depreciation

Depreciation is the reduction in the value of fixed assets due to its use or obsolescence. Generally depreciation is charged at some percentage on the value of fixed asset.

Example: The Trial balance shows the value of furniture on 31.3.2004 as Rs.60,000. Adjustment: Furniture is to be depreciated at 10%.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Depreciation A/c	Dr		6,000	
	To Furniture A/c				6,000
	(10% depreciation on furniture)				

To bring depreciation into Profit and Loss account the following transfer entry is required.

Transfer Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Profit & Loss A/c	Dr		6,000	
	To Depreciation A/c				6,000
	(10% depreciation on furniture transferred to Profit and Loss account)				

Depreciation will be shown

i) on the debit side of Profit and Loss account and

ii) on the assets side of the Balance Sheet by way of deduction from the value of concerned asset.

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Depreciation on Furniture	6,000		

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Furniture	60,000	
			Less: Depreciation @10%	6,000	
					54,000

1.1.11 Bad Debts

Debts which cannot be recovered are called **bad debts**. It is a loss for the business.

Example: The trial balance as on 31st March 2004 shows, Sundry debtors Rs.52,500. Adjustment: Write off Rs. 2,500 as bad debts.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Bad debts A/c	Dr		2,500	
	To Sundry debtors A/c				2,500
	(Bad debts written off)				

To transfer bad debts to Profit and Loss account the following transfer entry is required.

Transfer Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Profit & Loss A/c	Dr		2,500	
	To Bad debts A/c				2,500
	(Bad debts transferred to Profit & Loss A/c)				

Bad debts will be shown

i) on the debit side of Profit and Loss account and

ii) on the assets side of the Balance Sheet by way of deduction from sundry debtors.

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Bad debts A/c	2,500		

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Sundry debtors	52,500	
			Less: Bad debts written off	2,500	
					50,000

Note:

Bad Debts Account

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Sundry debtors A/c	2,500	By Profit & Loss A/c	2,500
	2,500		2,500

1.1.12 Provision for Bad and Doubtful Debts

Every business suffers a percentage of bad debts over and above the debts definitely known as irrecoverable and written off as Bad (Bad debts written off). If Sundry debtors figure is to be shown correctly in the Balance sheet provision for bad and doubtful debts must be adjusted. This Provision for bad and doubtful debts is generally provided at a certain percentage on Debtors, based on past experience.

While preparing final accounts, the bad debts written off given in adjustment is first deducted from the Sundry debtors then on the balance amount (Sundry debtors – Bad debt written off) provision for bad and doubtful debts calculated.

Example: The trial balance shows on 31.3.2004, Sundry Debtors as Rs.60,000.

Adjustment: Provide 5% provision for bad & doubtful debts on Sundry debtors.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Profit & Loss A/c	Dr		3,000	
	To Provision for bad & doubtful debts A/c				3,000
	(5% provision for bad and doubtful debts)				

Provision for bad and doubtful debts will be shown

i) on the debit side of Profit and Loss Account and

ii) on the assets side of the Balance sheet by way of deduction from Sundry debtors (after Bad debts written off if any).

Profit & Loss Account
for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Provision for bad and doubtful debts A/c	3,000		

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Sundry debtors	60,000	
			Less: Provision for bad and doubtful debts	3,000	
					57,000

Example : The Trial Balance as on 31st March 2004 shows the following:

Sundry Debtors Rs. 81,200

Adjustment: Write off Rs.1,200 as bad debts. Create a provision for Bad and doubtful debts @ 5% on Sundry Debtors.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Bad debts A/c	Dr		1,200	
	To Sundry debtors A/c				1,200
	(Bad debts written off)				
,,	Profit and Loss A/c	Dr		4,000	
	To Provision for Bad & doubtful debts				4,000
	(5% provision for bad & doubtful debts)				

Note: 5% should be calculated on Rs.80,000 (i.e. The amount ofSundry debtors after writing off Bad Debts).

Profit and Loss Account for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Bad Debts A/c	1,200				
To Provision for Bad & doubtful debts A/c	4,000				

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Sundry Debtors	81,200	
			Less: Bad debts written off	1,200	
				80,000	
			Less: Provision for Bad & Doubt--ful debts	4,000	
					76,000

Note:

Bad Debts Account

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Sundry Debtors A/c	1,200	By Profit & Loss A/c	1,200

1.1.13 Provision for Discount on Debtors

To motivate the debtors to make prompt payments, cash discount may be allowed to them. After providing provision for bad and doubtful debts, the remaining debtors are called as **good debtors**. They may pay their dues in time and avail themselves of the cash discount permissable. So a provision for discount on good debtors at a certain percentage may have to be created.

Example: The Trial Balance as on 31st March 2004 shows the following:

Sundry debtors Rs. 45,000

Adjustment: Create 2% provision for discount on Debtors.

Adjusting Entry

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Profit and Loss Account	Dr		900	
	To Provision for discount on Debtors				900
	(2% provision for discount on Debtors)				

Profit and Loss Account for the period ended 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Provision for discount on debtors	900				

Balance Sheet on 31st March 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Sundry Debtors	45,000	
			Less: Provision for discount on debtors	900	
					44,100

Example: The trial balance shows on 31.03.2004,

Sundry debtors Rs. 85,000

Adjustments: Bad debts written off Rs. 5,000. Provide @ 5% provision for bad and doubtful debts and @ 2% provision for discount on debtors.

Note:

	Rs.
Debtors as per Trial Balance	85,000
Less: Bad debts	5,000
Amount for which Bad & doubtful debts is to be calculated	80,000
Less: 5% Provision for bad and doubtful debts	4,000
Estimated value of good debtors	76,000
Less: 2% Provision for discount on debtors	1,520
	74,480

Adjusting Entries

Date	Particulars		L.F	Debit Rs.	Credit Rs.
2004 Mar 31	Bad debts A/c	Dr		5,000	
	To Sundry debtors A/c				5,000
	(Bad debts written off)				
”	Profit and Loss A/c	Dr		4,000	
	To Provision for bad and doubtful debts A/c				4,000
	(5% Provision for bad and doubtful debts)				

Date	Particulars		L.F	Debit Rs.	Credit Rs.
”	Profit and Loss A/c	Dr		1,520	
	To Provision for discount on debtors A/c				1,520
	(2% Provision for discount on debtors)				

Provision for discount on debtors will be shown

i) on the debit side of Profit and Loss account and

ii) on the asset side of the Balance sheet by way of deduction from Sundry debtors (after deducting bad debts written off and provision for bad and doubtful debts).

Profit and Loss Account for the year ended 31st March, 2004

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
To Bad debts A/c	5,000		
To Provision for Bad and doubtful debts A/c	4,000		
To Provision for discount on debtors	1,520		

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Sundry Debtors	85,000	
			Less: Bad debts	5,000	
				80,000	
			Less: Provision for bad and doubtful debts	4,000	
				76,000	
			Less: Provision for discount on debtors	1,520	
					74,480

Note :

Transfer Entry

Date	Particulars	L.F	Debit Rs.	Credit Rs.
2004				
Mar 31	Profit & Loss A/c Dr		5,000	
	To Bad debts A/c			5,000
	(Bad debts A/c closed by transfer to Profit & Loss A/c)			

Bad Debts Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2004			2004		
Mar 31	To Sundry Debtors A/c	5,000	Mar 31	By Profit & Loss A/c	5,000
		5,000			5,000

1.1.14 Provision for Discount on Creditors

Similar to cash discount allowed to debtors, the firm may have a chance to receive the cash discount from the creditors for prompt payment. Provision for discount on Creditors is calculated at a certain percentage on Sundry Creditors.

Example: The Trial balance for the year ended 31st March, 2004 shows Sundry Creditors Rs.50,000.

Adjustment:

Create a provision for discount on creditors @ 2%.

Adjusting Entry

Date	Particulars	L.F	Debit	Credit
2004				
Mar 31	Provision for discount on creditors A/c Dr		1,000	
	To Profit and Loss A/c			1,000
	(2% Provision for discount on creditors)			

Provision for discount on creditors will be shown

i) on the credit side of Profit and Loss account and

ii) on the liabilities side of the Balance sheet by way of deduction from Sundry creditors.

Profit and Loss Account for the year ended 31st March, 2004

Dr. Cr.

Particulars	Rs.	Particulars	Rs.
		By Provision for discount on Creditors	1,000

Balance Sheet as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry creditors	50,000				
Less: Provision for discount on creditors	1,000				
		49,000			

Chart showing the treatment of adjustments in the preparation of Final Accounts

Sl. No.	Type of Adjustment	Adjustment Entry	How dealt with in → Trading or Profit and Loss Account	Balance Sheet
1.	Closing stock	Closing Stock A/c Dr To Trading A/c	Credit side of the Trading A/c	Asset side.
2.	Outstanding Expenses: (Wages, Rent, Salaries etc.)	Respective Expenses A/c Dr To Respective outstanding expenses A/c <u>Example:</u> Wages A/c To Wages outstanding A/c Salaries A/c Dr To Salaries outstanding A/c	i. If the outstanding is an item chargeable to Trading A/c, add the outstanding expenses with relevant expenses in the debit side of the Trading A/c. ii. If it is an item chargeable to Profit and Loss A/c, add the outstanding expenses to the relevant expenses in the debit side of the Profit and Loss A/c.	Liabilities side.
3.	Prepaid Expenses: (Insurance Premium)	Respective prepaid Expenses A/c Dr To Respective Expenses A/c	Debit side of Trading & Profit and Loss A/c by way of deduction from respective expenses A/c.	Assets side.

		<u>Example:</u> Prepaid Insurance Premium A/c Dr To Insurance Premium A/c		
4.	Accrued Income (Commission)	Accrued Income A/c Dr To Respective Income A/c <u>Example:</u> Accrued Commission A/c To Commission A/c	Credit side of Profit and Loss A/c by way of addition to respective Income A/c.	Assets side.
5.	Income received in advance (Rent)	Respective Income A/c Dr To Respective Income received in advance A/c <u>Example:</u> Rent received A/c Dr To Rent received in advance A/c	Credit side of Profit and Loss A/c by way of deduction from the respective income A/c.	Liabilities side.
6.	Interest on Capital	Interest on Capital A/c Dr To Capital A/c	Debit side of Profit and Loss A/c	Liabilities side by way of addition to the Capital

7.	Interest on Drawings	Capital A/c Dr To Interest on drawings A/c	Credit side of the Profit and Loss A/c	Liabilities side by way of addition to the drawings which are ultimately deducted from the Capital.
8.	Interest on Loan (Interest on Bank Loan)	Interest A/c Dr To Interest Outstanding A/c <u>Example:</u> Interest on Bank Loan A/c To Interest Outstanding A/c	Debit side of Profit and Loss A/c by way of addition to the appropriate interest A/c	Liabilities side by way of addition to the particular loan A/c
9.	Interest on Investments	Accrued Interest on investments A/c Dr To Interest received A/c	Credit side of Profit and Loss A/c by way of addition to the appropriate interest A/c.	Assets side by way of addition to the particular investment A/c
10.	Depreciation on Fixed Asset	Depreciation A/c Dr To Fixed Asset A/c Example: Depreciation A/c Dr To Machinery A/c	Debit side of Profit and Loss A/c.	Assets side by way of deduction from the concerned asset account.

11.	Bad debts	Bad debts A/c Dr To Sundry debtors A/c	Debit side of Profit and Loss A/c	Assets side by way of deduction from Sundry debtors
12.	Provision for Bad and doubtful debts.	Profit and Loss A/c Dr To Provision for Bad and doubtful debts A/c	i. If the provision for bad and doubtful debts is given outside the Trial balance, then it is shown on the debit side of Profit and Loss account. ii. If provision for bad and doubtful debts is given in the Trial Balance (Old) and also in the adjustment (New): Add new provision for bad and doubtful debts with bad debts written off. a) If the old provision for bad and doubtful debts is less than the above total, then the difference will be shown on the debit side of the Profit and Loss account.	Assets side by way of deducting New Provision alone from Sundry debtors

			b) If the old provision for bad and doubtful debts is more than the above total, then the difference should be shown on the credit side of the Profit and Loss account.	
13.	Provision for Discount on Debtors	Profit and Loss A/c Dr To Provision for discount on debtors A/c	Debit side of Profit and Loss A/c (Amount of provision for discount is ascertained on good debtors)	Assets side by way of deduction from Sundry debtors (after deduction of bad debts and new provision for bad and doubtful debts)
14.	Provision for Discount on Creditors	Provision for Discount on Creditors A/c Dr To Profit and Loss A/c	Credit side of Profit and Loss A/c	Liabilities side by way of deduction from Sundry Creditors.

Format :

Trading and Profit and Loss Account of Thiru............ for the year ending 31st March, ...

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening stock		xxx	By Sales	xxx	
To Purchases	xxx		Less: Sales returns	xxx	
Less: Purchases returns	xxx				xxx
		xxx	By Closing Stock		xxx
To Wages	xxx				
Add: Outstanding wages	xxx				
		xxx			
To Factory rent	xxx				
Less: Prepaid Factory rent	xxx				
		xxx			
To Gross Profit c/d (Transferred to Profit & Loss A/c)		xxx			
		xxxx			xxxx
To Salaries	xxx		By Gross Profit b/d (Transferred from Trading A/c)		xxx
Add: Outstanding Salaries	xxx				
		xxx			
Insurance premium	xxx		By Commission received	xxx	
Less: Prepaid Insurance Premium	xxx		Add: Commission accrued but not yet received	xxx	
		xxx			
To Interest on Capital		xxx			xxx
To Interest on loan	xxx		By Rent received	xxx	
Add: Interest on loan outstanding	xxx		Less: Rent received in advance	xxx	
		xxx			xxx
			By Interest on drawings		xxx

	Rs.	Rs.		Rs.	Rs.
To Depreciation on:		xxx	By Discount received		xxx
Fixed Assets,			By New provision for		
Buildings, Machinery,			discount on creditors	xxx	
Furniture etc.			(given in adjustment)		
			Less: Old provision	xxx	
To Bad Debts	xxx				xxx
Add: New Bad Debts	xxx				
(given in adjustment)					
	xxx				
Add: New Provision for					
bad & doubtful debts	xxx				
(given in adjustment)					
	xxx				
Less: Old Provision	xxx				
		xxx			
To Discount allowed		xxx			
To New Provision for					
discount on debtors	xxx				
(given in adjustment)					
Less: Old Provision	xxx				
		xxx			
To Net profit		xxx			
(Transferred to					
Capital A/c)					
		xxx			xxx

Balance Sheet of Thiru............. as on 31st March, ...

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Capital	xxx		Cash in Hand		xxx
Add: Net Profit	xxx		Cash at Bank		xxx
(or)			Sundry debtors	xxx	
Less: Net Loss			Less: Bad debts		
	xxx		written off	xxx	
				xxx	

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Less: Drawings xxx			Less: Proision for Bad &		
Interest on drawings xxx			doubtful debts	xxx	
	xxx			xxx	
	xxx		Less: Provision for		
Less: Income tax	xxx		discount on debtors	xxx	
		xxx			xxx
Sundry Creditors	xxx		Land and Buildings	xxx	
Less: Provision for			Less: Depreciation	xxx	
Discount on Creditors	xxx				xxx
		xxx	Plant & Machinery	xxx	
Loan	xxx		Less: Depreciation	xxx	
Add: Interest on loan					xxx
outstanding	xxx		Furniture	xxx	
		xxx	Less: Depreciation	xxx	
Outstanding Expenses		xxx			xxx
Incomes received in			Goodwill	xxx	
advance		xxx	Less: Written off	xxx	
					xxx
			Closing stock		xxx
			Prepaid expenses		xxx
			Accrued Commission		xxx
		xxxx			xxxx

2.2 Preparation of Final Accounts

Illustration : 1

Pass necessary adjustment entries for the following adjustments:

1. Salaries outstanding Rs.20,000
2. Prepaid Insurance Rs.400
3. Interest accrued on investments Rs.1000
4. Commission received in advance Rs.2,000
5. To provide 10% interest on capital of Rs.5,00,000
6. Closing Stock Rs.4,00,000

Solution:

Adjustment Entries

Date	Particulars	L.F.	Debit Rs.	Credit Rs.
1.	Salaries A/c Dr To Salaries outstanding A/c (Salaries outstanding)		20,000	20,000
2.	Prepaid Insurance A/c Dr To Insurance A/c (Insurance prepaid)		400	400
3.	Accrued Interest A/c Dr To Interest A/c (Interest accrued on investments)		1,000	1,000
4.	Commission received A/c Dr To Commission received in advance A/c (Commission received in advance)		2,000	2,000
5.	Interest on Capital A/c Dr To Capital A/c (10% interest on capital)		50,000	50,000
6.	Closing Stock A/c Dr To Trading A/c (Closing stock recorded)		4,00,000	4,00,000

Illustration : 2

Pass necessary adjusting entries for the following adjustments:

1. Interest charged on drawings Rs.5,000
2. Interest on loan outstanding Rs.3,000
3. Depreciation at 10% is to be charged on Machinery Rs.3,00,000.

4. Write off bad debts Rs.2,000
5. To provide provision for Bad & doubtful debts at 2% on Sundry debtors Rs.60,000
6. To provide Provision for discount on creditors at 2% on Sundry Creditors worth Rs.1,00,000

Solution:

Journal Entries

Date	Particulars	L.F.	Debit Rs.	Credit Rs.
1.	Capital A/c Dr To Interest on drawings A/c (Interest charged on drawings)		5,000	5,000
2.	Interest on loan A/c Dr To Interest outstanding A/c (Interest due on loan)		3,000	3,000
3.	Depreciation A/c Dr To Machinery A/c (Depreciation on Machinery)		30,000	30,000
4.	Bad debts A/c Dr To Sundry debtors A/c (Bad debts written off)		2,000	2,000
5.	Profit and Loss A/c Dr To Provision for Bad & doubtful debts A/c (2% provision for Bad & doubtful debts)		1,200	1,200
6.	Provision for discount on creditors A/c Dr To Profit & Loss A/c (2% provision for discount on Creditors)		2,000	2,000

Illustration : 3

The Trial Balance as on 31st March 2004 shows Sundry debtors as Rs.12,000 and bad debts as Rs.300.

No adjustment given.

Solution:

Profit and Loss Account for

Dr **the year ended 31st March 2004** Cr

Particulars	Rs.	Particulars	Rs.
To Bad Debts	300		

Balance Sheet as on 31st March 2004

Liabilities	Rs.	Assets	Rs.
		Sundry debtors	12,000

Illustration : 4

The Trial Balance as on 31st March 2004 shows the following:

	Dr.	Cr.
Sundry Debtors	40,800	—
Bad debts written off	1,400	—

Adjustment: Write off Rs.800/- as bad debts.

Solution:

Adjusting Entry

Date	Particulars	L.F.	Debit Rs.	Credit Rs.
	Bad debts A/c Dr.		800	
	To Sundry debtors A/c			800
	(bad debts written off)			

Note:

In the above example, Trial Balance shows Rs.1,400 as Bad debts. This means the double entry in respect of Rs.1,400 i.e.debiting Bad debts and crediting Sundry debtors is already completed. Hence Rs.1,400 found in the Trial Balance will not affect the sundry debtors of Rs.40,800.

But for the adjustment given outside the Trial Balance, the adjustment has to be done after the preparation of Trial Balance and this would result in increasing bad debts by Rs.800 and decreasing debtors by Rs.800.

Profit and Loss Account for
the year ending 31st March 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Bad Debts	1,400				
Add: Bad debts Written off	800				
		2,200			

Balance Sheet as on 31st March 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Sundry Debtors	40,800	
			Less: Bad debts written off	800	
					40,000

Note:

Dr. **Bad Debts Account** Cr.

Particulars	Rs.	Particulars	Rs.
To Balance b/d	1,400	By Profit & Loss	2,200
To Sundry Debtors	800		
	2,200		2,200

Illustration : 5

The following items are found in the Trial Balance of Mr.Vivekanandan as on 31st March 2004.

Sundry debtors	Rs. 64,000
Bad debts	Rs. 1,200
Provision for Bad & doubtful debts	Rs. 2,800

Adjustment:

Provide for bad & doubtful debts at 5% on Sundry debtors.

Give necessary entries and show how these items will appear in the final accounts.

Solution:

Step :1

Transfer Entry

Date	Particulars	L.F.	Debit Rs.	Credit Rs.
2004				
Mar 31	Provision for bad & doubtful debts A/c Dr.		1,200	
	To Bad debts A/c (Transfer of bad debts)			1,200

Note:

If Provision for bad and doubtful debts account is maintained, the loss on account of bad debts is taken to Profit and Loss Account not directly but via provision for bad and doubtful debts account.

Step 2:

Apply the rule:

	Rs.
Bad debts	1,200
Add: New Provision required	
5% on 64,000	3,200
Total required	4,400
Less: Existing provision	2,800
Amount required	1,600

Adjusting Entry

Date	Particulars	L.F.	Debit Rs.	Credit Rs.
2004				
Mar 31	Profit and Loass A/c Dr.		1,600	
	To Provision for bad and doubtful debts A/c (Additional provision for bad and doubtful debts)			1,600

Profit and Loss Account for the Period ended 31st March 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Provision for bad & doubtful debts A/c					
Bad debts	1,200				
Add: New provision	3,200				
	4,400				
Less: Old provision	2,800				
		1,600			

Balance Sheet as on 31st March 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Debtors	64,000	
			Less: Provision for Bad & doubt- -ful debts (New)	3,200	
					60,800

Note:

When the existing provision is larger than what is required even after the transfer of bad debts, **the second step will give a negative figure, which indicates that the profit and loss account is to be credited with the excess.**

Illustration : 6

Following are the balances extracted from the Trial Balance of Mr.Mohan as on 31st March, 2002.

Trial Balance as on 31st March, 2002

Particulars	Debit Rs.	Credit Rs.
Sundry debtors	60,000	
Bad debts	5,000	
Provision for bad & doubtful debts		10,000

Adjustment

Create provision for bad & doubtful debts @ 5% on Sundry Debtors.

Pass adjusting entry and show how these items will appear in the final accounts.

Solution:

Adjusting Entry

Date	Particulars	L.F.	Debit Rs.	Credit Rs.
2002 Mar 31	Provision for Bad and Doubtful debts A/c Dr		2,000	
	To Profit & Loss A/c			2,000
	(Excess: 5% Provision for bad and doubtful debts)			

Profit and Loss Account for the year ending 31st March, 20029

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
			By Provision for bad and doubt- -ful debts:		
			Old Provision for bad & doubtful debts	10,000	
			Less:Bad debts 5000		
			New Provision 3000	8,000	
					2,000

Balance Sheet as on 31st March, 2002

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Sundry debtors	60,000	
			Less: New Provision	3,000	
					57,000

Illustration : 7

The following balances have been extracted from the trial balance of Mr.Ashok as on 31.3.2002.

Trial Balance of Mr.Ashok as on 31st March, 2002

Particulars	Debit Rs.	Credit Rs.
Debtors	2,01,200	
Bad debts	9,400	
Provision for bad & doubtful debts		24,000
Provision for Discount on debtors		1,200
Discount allowed	18,600	

Adjustments:

1. Write off additional bad debts Rs.4,800
2. Create Provision of 10% for bad & doubtful debts on debtors.
3. Create Provision of 2% for discount on debtors.

Show how these items will appear in the Profit and Loss Account and Balance Sheet.

Solution:

Profit and Loss Account of Mr.Ashok
for the year ending 31st March, 2002

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Provision for Bad & Doubtful debts A/c					
Bad debts	9,400				
Add: Bad debts written off	4,800				
	14,200				
Add: New Provision	19,640				

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
	33,840				
Less: Old provision	24,000				
		9,840			
To Provision for discount on debtors					
Discount allowed	18,600				
Add: New provision	3,535				
	22,135				
Less: Old provision	1,200				
		20,935			

Balance Sheet as on 31st March, 2002

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
			Sundry debtors	2,01,200	
			Less: Bad debts written off	4,800	
				1,96,400	
			Less: New provision for bad & doubt--ful debts	19,640	
				1,76,760	
			Less: New Provision for discount on debtors	3,535	
					1,73,225

Illustration : 8

From the following trial balance of a trader, make out a Trading and Profit and Loss account and Balance Sheet as on 31st March, 2000.

Particulars	Debit Rs.	Credit Rs.
Sales		4,20,000
Purchases	1,05,000	

Printing Charges	2,500	
Wages	77,500	
Salaries	12,500	
Opening Stock	2,25,000	
Carriage Inwards	8,800	
General Expenses	26,250	
Trade Marks	5,000	
Rates and Taxes	2,500	
Capital		1,74,800
Discount received		1,250
Loan		1,75,000
Buildings	2,00,000	
Furniture	25,000	
Machinery	50,000	
Cash	1,000	
Bank	30,000	
	7,71,050	7,71,050

Adjustments:

1. The closing stock was valued at Rs.3,20,000.
2. Outstanding Salaries Rs.10,000.
3. Prepaid rates & taxes Rs.500.

Solution:

Trading and Profit and Loss Account for the year ending 31st March, 2000

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		2,25,000	By Sales		4,20,000
To Purchases		1,05,000	By Closing Stock		3,20,000
To Wages		77,500			
To Carriage inwards		8,800			
To Gross Profit c/d (Transferred to Profit and Loss A/c)		3,23,700			
		7,40,000			7,40,000
To Printing charges		2,500	By Gross Profit b/d (Transferred from Trading A/c)		3,23,700
To Salaries	12,500				
Add: Outstanding	10,000				
		22,500	By Discount received		1,250
To General expenses		26,250			
To Rates and Taxes	2,500				
Less: Prepaid	500				
		2,000			
To Net Profit (Transferred to Capital A/c)		2,71,700			
		3,24,950			3,24,950

Balance Sheet as on 31st March, 2000

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Outstanding Salary		10,000	Cash		1,000
Loans		1,75,000	Bank		30,000
Capital	1,74,800		Closing Stock		3,20,000
Add: Net Profit	2,71,700	4,46,500	Prepaid rates & taxes		500
			Building		2,00,000
			Furniture		25,000
			Machinery		50,000
			Trade Marks		5,000
		6,31,500			6,31,500

Illustration : 9

The following Trial Balance has been extracted from the books of Mr.Bhaskar on 31.03.2003.

Trial Balance

Particulars	Debit Rs.	Credit Rs.
Machinery	40,000	
Cash at Bank	10,000	
Cash in Hand	5,000	
Wages	10,000	
Purchases	80,000	
Stock (01.04.2002)	60,000	
Sundry debtors	40,000	
Bills Receivable	29,000	
Rent	4,000	
Interest on Bank Loan	500	
Commission received		3,000
General Expenses	12,000	
Salaries	7,500	
Discount received		4,000
Capital		90,000
Sales		1,20,000
Bank Loan		40,000
Sundry Creditors		40,000
Purchase returns		5,000
Sales returns	4,000	
	3,02,000	3,02,000

Adjustments:

1. Closing Stock Rs.80,000
2. Interest on Bank loan not yet paid Rs.400
3. Commission received in advance Rs.1,000

Prepare Trading and Profit and loss Account for the year ended 31.03.2003 and Balance Sheet as on that date after giving effect to the above adjustments.

Solution:

Trading and Profit and Loss Account of Mr.Bhaskar for the year ending 31st March, 2003

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		60,000	By Sales	1,20,000	
To Purchases	80,000		Less: Returns	4,000	1,16,000
Less: Returns	5,000	75,000	By Closing stock		80,000
To Wages		10,000			
To Gross Profit c/d		51,000			
(Transferred to Profit and Loss A/c)					
		1,96,000			1,96,000
To Rent		4,000	By Gross Profit b/d		51,000
To Interest on Bank Loan	500		(Transferred from Trading A/c)		
Add: Outstanding	400		By Commission		
		900	received	3,000	
To General Expenses		12,000	Less: Received in		
To Salaries		7,500	advance	1,000	
To Net Profit		32,600			2,000
(Transferred to Capital A/c)			By Discount received		4,000
		57,000			57,000

Balance Sheet as on 31st March, 2003

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		40,000	Cash in hand		5,000
Bank Loan	40,000		Cash at Bank		10,000
Add: Outstanding			Bills receivable		29,000
interest on loan	400		Sundry debtors		40,000
		40,400	Closing Stock		80,000
Commission received			Machinery		40,000
in advance		1,000			
Capital	90,000				
Add: Net Profit	32,600				
		1,22,600			
		2,04,000			2,04,000

Illustration : 10

The following are the balances extracted from the books of Mrs.Suguna as on 31st March, 2004.

Debit Balances	Rs.	Credit Balances	Rs.
Drawings	40,000	Capital	2,00,000
Cash at Bank	17,000	Sales	1,60,000
Cash in hand	60,000	Sundry Creditors	45,000
Wages	10,000		
Purchases	20,000		
Stock (31.03.03)	60,000		
Buildings	1,00,000		
Sundry debtors	44,000		
Bills Receivable	29,000		
Rent	4,500		
Commission	2,500		
General Expenses	8,000		
Furniture	5,000		
Suspense Account	5,000		
	4,05,000		4,05,000

Adjustments:

1. Closing Stock Rs.40,000 valued as on 31.03.04.
2. Interest on Capital at 6% to be provided.
3. Interest on Drawings at 5% to be provided.
4. Depreciate buildings at the rate of 10% per annum.
5. Write off Bad debts Rs.1,000.
6. Wages yet to be paid Rs.500

Prepare Trading and Profit & Loss Account and Balance Sheet as on 31st March 2004.

Solution:

Trading and Profit and Loss Account of Mrs. Suguna for the year ending 31st Marh, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		60,000	By Sales		1,60,000
To Purchases		20,000	By Closing Stock		40,000
To Wages	10,000				
Add: Outstanding	500				
		10,500			
To Gross Profit c/d (Transferred to Profit & Loss A/c)		1,09,500			
		2,00,000			2,00,000
To Rent		4,500	By Gross Profit b/d (Transferred from Trading A/c)		1,09,500
To Commission		2,500			
To General Expenses		8,000			
To Interest on Capital		12,000	By interest on Drawings		2,000
To Depreciation on buildings		10,000			
To Bad debts written off		1,000			
To Net Profit (Transferred to Capital A/c)		73,500			
		1,11,500			1,11,500

Balance Sheet of Mrs.Suguna as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		45,000	Cash in hand		60,000
Outstanding wages		500	Cash at bank		17,000
Capital	2,00,000		Bills Receivable		29,000
Add: Net Profit	73,500		Sundry Debtors	44,000	
	2,73,500		Less: Bad debts		
Add: Interest on			written off	1,000	
Capital	12,000				43,000
	2,85,500		Closing Stock		40,000
Less: Drawings	40,000		Buildings	1,00,000	
	2,45,500		Less: Depreciation	10,000	
Less: Interest on					90,000
Drawings	2,000		Furniture		5,000
		2,43,500	Suspense Account		5,000
		2,89,000			2,89,000

Illustration : 11

Mr.Senthil's book shows the following balances. Prepare his Trading and Profit and Loss account for the year ended 31st March 2005 and Balance Sheet as on that date.

Particulars	Debit Rs.	Credit Rs.
Stock on 1.4.2004	1,50,000	
Purchases	1,30,000	
Sales		3,00,000
Carriage inwards	2,000	
Salaries	50,000	
Printing and Stationery	8,000	

Particulars	Debit Rs.	Credit Rs.
Drawings	17,000	
Sundry Creditors		20,000
Sundry debtors	1,80,000	
Furniture	10,000	
Capital		2,50,000
Postage & Telephone	7,500	
Interest paid	4,000	
Machinery	41,500	
Loan Account		25,000
Suspense A/c		5,000
	6,00,000	6,00,000

Adjustments:

1. Closing Stock Rs.1,20,000
2. Provide 5% for bad & doubtful debts on debtors
3. Depreciate machinery & furniture by 5%
4. Allow interest on capital at 5%
5. Prepaid printing charges Rs.2,000

Solution:

Trading and Profit and Loss Account of Mr.Senthil for the period ending 31st March 2005

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		1,50,000	By Sales		3,00,000
To Purchases		1,30,000	By Closing Stock		1,20,000
To Carriage inwards		2,000			
To Gross Profit c/d (Transferred to Profit & Loss A/c)		1,38,000			
		4,20,000			4,20,000

To Salaries		50,000	By Gross Profit b/d (Transferred from Trading A/c)		1,38,000
To Printing & Stationery	8,000				
Less: Prepaid	2,000				
		6,000			
To Postage & Telephone		7,500			
To Interest paid		4,000			
To Provision for Bad & Doubtful debts		9,000			
To Depreciation on:					
Machinery	2075				
Furniture	500				
		2,575			
To interest on Capital		12,500			
To Net Profit (Transferred to Capital A/c)		46,425			
		1,38,000			1,38,000

Balance Sheet of Mr.Senthil as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		20,000	Sundry Debtors	1,80,000	
Loan Account		25,000	Less: Provision for bad & doubtful debts	9,000	
Capital	2,50,000				
Add: Net Profit	46,425				
	2,96,425				1,71,000
Add: Interest on Capital	12,500		Closing stock		1,20,000
	3,08,925		Prepaid Printing charges		2,000
Less: Drawings	17,000		Furniture	10,000	

		2,91,925	Less: Depreciation	500	
Suspense Account		5,000			9,500
			Machinery	41,500	
			Less: Depreciation	2,075	
					39,425
		3,41,925			3,41,925

Illustration : 12

From the Trial Balance of Mr.Raghuraman as on 31st March, 2003 prepare Final accounts.

Particulars	Debit Rs.	Credit Rs.
Capital		3,60,000
Drawings	6,400	
Stock (1.4.2002)	18,000	
Purchases	1,29,000	
Sales		2,38,000
Sales Returns	4,000	
Wages	32,000	
Insurance Premium	3,000	
Packing Expenses	4,000	
Postage	200	
Advertisement	2,000	
Carriage outwards	16,000	
Bad debts	600	
Commission received		1,000
Bills Payable		18,000
Bank overdraft		6,000
Land & Buildings	2,61,000	
Plant & Machinery	1,80,000	
Sundry Debtors	50,800	
Sundry Creditors		84,000
	7,07,000	7,07,000

Adjustments:

1. Closing Stock on 31.03.2003, Rs.15,000.
2. Write off bad debts Rs.800 and make provision for Bad & doubtful debts @ 5% on Sundry debtors.
3. Commission accrued but not received Rs.2,000.

Solution:

Trading and Profit and Loss Account of Mr.Raguraman for the year ending 31st March, 2003

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		18,000	By Sales	2,38,000	
To Purchase		1,29,000	Less:Sales		
To Wages		32,000	Returns	4,000	
To Packing Expenses		4,000			2,34,000
To Gross Profit c/d (Transferred to Profit & Loss A/c)		66,000	By Closing stock		15,000
		2,49,000			2,49,000
To Insurance		3,000	By Gross Profit b/d (Transferred from Trading A/c)		66,000
To Postage		200			
To Advertisement		2,000			
To Carriage outwards		16,000	By Commission		
To Bad debts	600		received	1,000	
Add: Bad debts written off	800		Add: Accrued Commission	2,000	
		1400			3,000
To Provision for bad & doubtful debts		2,500			
To Net Profit (Transfered to Capital A/c)		43,900			
		69,000			69,000

Balance Sheet of Mr. Raguraman as on 31st March, 2003

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		84,000	Sundry Debtors	50,800	
Bills Payable		18,000	Less: Bad debts		
Bank Overdraft		6,000	written off	800	
Capital	3,60,00			50,000	
Add: Net Profit	43,900		Less: Provision		
	4,03,900		for Bad &		
Less: Drawings	6,400		Doubtful debts	2,500	47,500
		3,97,500	Closing Stock		15,000
			Accrued Commission		2,000
			Land & Buildings		2,61,000
			Plant & Machinery		1,80,000
		5,05,500			5,05,500

Illustration : 13

From the following particulars of Mrs.Sulochana, prepare Trading and Profit and Loss Account and Balance Sheet for the year ending 31st March, 2004.

Trial Balance

Particulars	Debit Rs.	Credit Rs.
Capital		7,50,000
Cash	40,000	
Buildings	4,00,000	
Salary	1,10,000	
Rent & Taxes	21,000	
Opening Stock	1,20,000	
Machinery	1,20,000	
Drawings	40,000	
Purchases	5,00,000	

Sales		7,50,000
Carriage inwards	5,000	
Fuel, Gas	37,000	
Sundry Debtors	2,50,000	
Sundry Creditors		1,20,000
Bills Receivable	53,000	
Dividend		28,000
Loan		60,000
Bad debts	2,000	
Advertisement	16,000	
Provision for Bad & Doubtful Debts		6,000
	17,14,000	17,14,000

Adjustments:

1. Closing stock Rs.1,40,000.
2. Write off Rs.10,000 as bad debts; Provide 5% for Bad and Doubtful debts.
3. Make provision for discount on Debtors at 2%.
4. Provision for discount on Creditors at 2%.

Solution:

Trading and Profit and Loss Account of Mrs. Sulochana for the year ending 31st March, 2004

Dr. Cr.

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		1,20,000	By Sales		7,50,000
To Purchases		5,00,000	By Closing Stock		1,40,000
To Carriage inwards		5,000			
To Fuel, Gas		37,000			
To Gross Profit c/d (Transferred to Profit & Loss A/c)		2,28,000			
		8,90,000			8,90,000

To Salary		1,10,000	By Gross Profit b/d (Transferred from Trading A/c)		2,28,000
To Rent & Taxes		21,000			
To Advertisement		16,000			
To Provision for bad & doubtful debts A/c			By Dividend		28,000
Bad debts	2,000		By Provision for discount on Creditors		2,400
Add: Bad debts written off	10,000				
	12,000				
Add: New Provision	12,000				
	24,000				
Less: Old Provision	6,000				
		18,000			
To Provision for discount on debtors		4,560			
To Net Profit (Transferred to Capital A/c)		88,840			
		2,58,400			2,58,400

Balance Sheet of Mrs.Sulochana as on 31st March, 2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors	1,20,000		Cash		40,000
Less: Provision for discount on creditors	2,400		Bills Receivable		53,000
			Sundry Debtors	2,50,000	
		1,17,600	Less: Bad debts written off	10,000	
Loan		60,000		2,40,000	
Capital	7,50,000		Less: New Provision for Bad & doubtful debts	12,000	
Add: Net Profit	88,840				
	8,38,840			2,28,000	
Less: Drawings	40,000		Less: New Provision for discount on debtors	4,560	
		7,98,840			

					2,23,440
			Closing Stock		1,40,000
			Buildings		4,00,000
			Machinery		1,20,000
		9,76,440			9,76,440

Illustration : 14

Prepare Trading, Profit and Loss A/c and Balance Sheet as on 31.3.2005 from the following Trial Balance of Mr.Imran.

Particulars	**Debit Rs.**	**Credit Rs.**
Capital		1,50,000
Bank Overdraft		25,200
Sales		9,03,000
Furniture	30,600	
Business Premises	1,20,000	
Creditors		79,800
Opening Stock	1,32,000	
Debtors	1,08,000	
Rent		6,000
Purchases	6,60,000	
Discount		2,400
Insurance	16,000	
Wages	24,000	
Salaries	54,000	
Advertisement	13,200	
Carriage on Purchases	10,800	
Provision for bad and doubtful debts		7,000
Bad debts	800	
Income tax	4,000	
	11,73,4000	11,73,400

Adjustments:

1. Closing Stock on 31.03.2005 was Rs.1,20,000
2. Make a provision of 5% on Sundry debtors for bad and doubtful debts.
3. Rent received in advance Rs.2,000
4. Provide 10% depreciation on Furniture and Business Premises.

Solution:

Trading and Profit and Loss Account of Mr.Imran for the year ending 31st March, 2005

Dr. Cr.

Particulars	**Rs.**	**Rs.**	**Particulars**	**Rs.**	**Rs.**
To Opening Stock		1,32,000	By Sales		9,03,000
To Purchases		6,60,000	By Closing stock		1,20,000
To Wages		24,000			
To Carriage on Purchases		10,800			
To Gross Profit c/d (Transferred to Profit & Loss A/c)		1,96,200			
		10,23,000			10,23,000
To Insurance		16,000	By Gross Profit b/d (Transferred from Trading A/c)		1,96,200
To Salaries		54,000			
To Advertisement		13,200			
To Depreciation on:			By Rent	6,000	
Furniture	3060		Less: Received		
Business Premises	12,000		in advance	2,000	
		15,060			4,000
To Net Profit (Transferred to Capital A/c)		1,05,140	By Discount		2,400
			By Provision for bad & doubtful debts		
			Old Provision	7,000	
			Less: Bad debts 800		
			New Provision 5400	6,200	
					800
		2,03,400			2,03,400

Balance Sheet of Mr.Imran as on 31st March, 2005

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		79,800	Sundry Debtors	1,08,000	
Bank Overdraft		25,200	Less: New Provision		
Rent received in			for bad and doubtful		
advance		2,000	debts	5,400	
Capital	1,50,000				1,02,600
Add: Net profit	1,05,140		Closing Stock		1,20,000
	2,55,140		Furniture	30,600	
Less: Income Tax	4,000		Less: Depreciation	3,060	
		2,51,140			27,540
			Business Premises	1,20,000	
			Less: Depreciation	12,000	
					1,08,000
		3,58,140			3,58,140

Note:

Total of Bad debts written off and new provision for bad and doubtful debts is (Rs.800 + Rs.5,400) Rs.6,200. Old provision for bad and doubtful debts given in the Trial Balance is Rs.7,000 which is greater than Rs. 6,200. So the difference will appear on the credit side of of the Profit and Loss account as follows:

Old provision	Rs. 7,000	
Less: Total of bad debts and new provision for bad and doubtful debts (Rs.800 + Rs. 5,400)	Rs. 6,200	
		Rs. 800

QUESTIONS

I. Objective type:

a) Fill in the blanks:

1. Net Profit is transferred from Profit and loss account to ________ account.
2. Closing stock is valued at Cost Price or ________ price whichever is lower.
3. Outstanding expenses are shown on the ________ side of the balance sheet.
4. Prepaid expenses are shown on the ________ side of the balance sheet.
5. Income accrued but not received will be shown on the ________ side of the Balance sheet.
6. Income received in advance will be shown on the ________side of the Balance sheet
7. Interest on capital is debited in ________ account
8. Interest on drawings is credited in ________ account.
9. Interest on loan borrowed unpaid is shown on the ________ side of the Balance sheet.
10. Depreciation is deducted from the concerned ________ in the Balance sheet.
11. Provision for Bad and Doubtful debts is deducted from ________ in the Balance sheet.
12. Provision for discount on creditors is deducted from ________in the Balance sheet.
13. Debts which are not recoverable from Sundry debtors are termed as ________.

(Answers: 1. Capital, 2. Market, 3. Liabilities, 4. Assets, 5. Assets, 6. Liabilities, 7. Profit & Loss A/c., 8.Profit and Loss Account, 9. Liabilities, 10. Fixed asset, 11. Sundry debtors, 12. Sundry creditors, 13. Bad debts).

b) Choose the correct answer:

1. Returns inwards are deducted from
   a) Purchases   b) Sales   c) Returns outward
2. The Profit and Loss account shows
   a) Financial position of the concern
   b) Net profit or Net loss   c) Gross profit or Gross Loss
3. Rent outstanding is
   a) a liability   b) an asset   c) an income
4. Closing stock is shown in
   a) Profit and loss account
   b) Trading account and Balance sheet
   c) None of the above.
5. Opening stock is shown in
   a) Balance sheet   b) Profit and Loss account
   c) Trading account
6. Gross Profit is transferred to
   a) Capital account   b) Profit and loss account
   c) None of the above
7. Interest on capital is added to
   a) Expense A/c   b) Income A/c   c) Capital A/c
8. Interest on drawings is deducted from
   a) Income A/c   b) Capital A/c   c) Expense A/c
9. Outstanding interest on loan borrowed is to be added to
   a) Asset A/c   b) Income A/c   c) Loan A/c
10. All the items given in the adjustment will appear at ________ in the Final accounts.
    a) Three places   b) Two places   c) One Place

(Answers: 1. (b); 2. (b); 3. (a); 4. (b); 5. (c); 6. (b); 7. (c); 8. (b): 9. (c); 10. (b))

II. Other Questions :

1. What is outstanding expense?
2. What is prepaid expense?
3. What is accrued income?
4. What is income received in advance?
5. What is bad debt?
6. Write notes on Provision for bad and Doubtful debts.
7. Write notes on Provision for discount on Debtors.
8. Write notes on Provision for discount on Creditors.
9. What is adjusting entry?
10. Write notes on
    a) Trading Account   b) Profit and loss account and
    c) Balance sheet.

III. Problems:

1. Pass necessary adjusting entries for the following adjustments:
   a) Closing stock Rs. 6,00,000.
   b) Provide 6% interest on capital of Rs. 16,00,000
   c) Rent received in advance Rs. 5,000
   d) Interest accrued on investments Rs. 2,000
   e) Insurance premium prepaid Rs. 1,000
   f) Wages outstanding Rs. 15,000.
2. Pass necessary adjusting entries for the following adjustments:
   a) Interest on drawings Rs. 10,000.
   b) Interest on loan outstanding Rs.5,000.
   c) Depreciation at 5% on furniture Rs.50,000.
   d) Write off bad and doubtful debts Rs.3,000.

e) Provide provision for bad and doubtful debts at 5% on Sundry debtors Rs.4,00,000.

f) Provide provision for discount on creditors at 2% on Sundry creditors Rs. 3,50,000.

3. Give adjusting entry and transfer entry for the following adjustments:

   a) Interest on drawings Rs. 5,000.

   b) Depreciation on machinery Rs.4,000.

   c) Write off bad debts Rs.2,000.

4. The value of closing stock shown outside the Trial Balance (31.3.05) is Rs.2,50,000. Pass adjusting entry. Show how this item will appear in the Final accounts as on 31.3.05.

5. Trial Balance (31.3.05) shows salaries paid Rs.1,50,000. Salary for March 2005 Rs.4,000 not yet paid. Pass adjusting entry and show how this item will appear in the Final accounts.

6. Trial Balance as on 31.3.05 shows Rs.40,000 as Insurance premium paid. Unexpired insurance premium Rs.5,000. Pass adjusting entry and show how this item will appear in the Final accounts.

7. Credit side of Trial Balance as on 31.4.05 shows 'Commission received Rs.10,000.' Commission accrued but not yet received Rs.4,000. Pass adjusting entry and show how this item will appear in the Final accounts.

8. Trial balance as on 31.3.05 shows 'Rent received Rs.30,000.' Rent received in advance Rs.6,000. Pass adjusting entry and show how this item will appear in the Final accounts.

9. As per Trial Balance (31.3.05) capital is Rs. 6,00,000. Provide 6% interest on capital. Pass adjusting and transfer entries. Show how this item will appear in the Final accounts.

10. The Trial Balance shows the followings

Capital as on 31.3.03	–	Rs.6,00,000
Drawing as on 31.3.03	–	Rs.50,000

Charge interest on drawings @ 5%. Pass adjusting and transfer entry. Show how this item will appear in the Final accounts.

11. The Trial Balance (31.3.04) shows the following:

	Dr.	Cr.
Bank loan @ 10% (1.4.03)	----	Rs. 10,00,000
Interest paid	Rs. 60,000	

Provide interest outstanding. Pass adjusting entry and show how this item will appear in the Final accounts.

12. The trial balance shows the following as on 31.3.98.

Capital	Rs. 5,00,000
Drawings (1.7.97)	Rs. 50,000

Charge interest on drawings @ 5% . Pass adjusting and transfer entry. Show how this item will appear in the Final accounts.

(Oct. 2000)

13. Rent received shown in the Trial Balance as on 31st March 2001, Rs.10,000. Rent received in advance is Rs.1,000. You are required to show how it appears in the Profit and Loss account and Balance sheet.

(June 2002)

14. How will the following adjustment appear in the Balance sheet as on 31.3.2000.

Sundry debtors	R 21,000
Bad debts to be written off	Rs. 1,000

Adjustment: Provide @ 5% provision for Bad and Doubtful debts and @2% Provision for discount on Debtors.

(Answer: Rs.18,620 - March 2003)

15. Commission received given in Trial Balance is Rs.1,000 as on 31st March 1994. Commission accrued but not yet received Rs.150. Show the adjusting entry.

(June 2003)

16. The Trial Balance shows the value of machinery on 31.3.04 as Rs.50,000. Machinery is to be depreciated at 10%. Pass adjustment entry and show how this item will appear in the Final accounts.

17. The Trial Balance as on 31st March 2003 show Sundry debtors Rs.60,000. Write off bad debts Rs.4,000. Pass adjusting and transfer entry. Show how this item will appear in the Final accounts.

18. The Trial Balance shows on 31.3.2002, Sundry debtors Rs.1,50,000. Provide 5% provision for bad and doubtful debts on Sundry debtors. Pass adjusting entry and how this item will appear in the Final accounts.

19. The Trial Balance shows on 31.3.2002, Sundry debtors Rs.1,25,000.

Adjustment:

1. Bad debts to be written off Rs.5,000.
2. Provide @ 5% Provision for bad and doubtful debts and
3. Provide @ 2% Provision for discount on debtors.

Pass entries and show how these items will appear in the Final accounts.

20. The Trial Balance as on 31st March 2003 shows.

Sundry debtors 90,000 ---

Adjustment: Create 2% Provision for discount on Debtors.

Pass Journal entry and show how this item will appear in the Final accounts.

21. The Trial Balance shows sundry creditors at Rs.10,000 on 31.3.2000.

Adjustment: It is desired to make a provision for discount on Sundry creditors at 2½ %.

You are required to show how it appears in Profit and Loss account and Balance sheet.

(March 2002)

22. The following is the Trial Balance extracted from the books of Mr.Kumar as on 31.3.96.

Prepare Trading and Profit and Loss account and Balance sheet on 31.3.96.

Debit Balances	Rs.	Credit Balances	Rs.
Buildings	30,000	Capital	40,000
Machinery	31,400	Purchase returns	2,000
Furniture	2,000	Sales	2,80,000
Motor Car	16,000	Sundry Creditors	9,600
Purchases	1,88,000	Discount received	1,000
Sales returns	1,000	Provision for bad and	
Sundry Debtors	30,000	doubtful debts	600
General Expenses	1,600		
Cash at Bank	9,400		
Rates and Taxes	1,200		
Bad Debts	400		
Insurance premium	800		
Discount allowed	1,400		
Opening stock	20,000		
	3,33,200		3,33,200

Adjustments:

i) Outstanding rates and taxes Rs.1,600.

ii) Insurance Premium Prepaid Rs.200.

iii) Maintain Provision for bad and doubtful debts at 5% on debtors.

iv) Depreciate Motor car by 10%., Furniture by 4% and Buildings by 3%.

v) Stock on 31.3.96 Rs.20,000.

(Modified :March, 2000)

(Answer: G.P. Rs. 93,000; N.P. Rs. 83,720; B/s Rs. 1,34,920)

23. From the undermentioned Trial Balance of Mr.Saleem as on 31.3.2001, prepare Trading and Profit and Loss Account and Balance sheet as on that date.

Trial Balance

Debit Balances	Rs.	Credit Balances	Rs.
Cash in Hand	1,500	Capital	80,000
Purchases	1,20,000	Bank loan @ 4%	20,000
Opening stock	40,000	Bills payable	25,000
Sundry Debtors	60,000	Sundry Creditors	25,000
Plant and Machinery	50,000	Sales	2,00,000
Furniture	20,000	Provision for bad &	
Bills Receivable	15,000	doubtful debts	1,500
Rent and Taxes	10,000	Interest	1,000
Wages	16,000		
Salaries	20,000		
	3,52,500		3,52,500

Additional information supplied:

i) Closing stock Rs.50,000.

ii) Provide for outstanding liabilities.

Rent and taxes	Rs.2,000.
Wages	Rs.3,000.
Salaries	Rs.4,000.

iii) Depreciation on Plant and Machinery @5% and on furniture @ 10%.

iv) Provide 4% interest on Bank loan.

v) Write off bad debts Rs.2,000.

(Answer: G.P. Rs. 71,000; N.P. Rs.30,200; B/s Rs. 1,90,000)

24. Trial Balance of Anuradha Agencies as on 31.03.2001:

Debit Balances	Rs.	Credit Balances	Rs.
Drawings	1,800	Capital	80,000
Buildings	15,000	General Reserve	20,000
Furniture & Fittings	7,500	Loan from Hari@6%	15,000
Computer	25,000	Sales	1,00,000
Interest on loan	900	Commission received	7,500
Loose tools	6,100	Sundry Creditors	10,000
Purchases	75,000		
Stock on 1.4.2000	25,000		
General Expenses	15,000		
Freight inward	2,000		
Freight outward	1,000		
Sundry Debtors	28,000		
Bank	20,200		
Goodwill	10,000		
	2,32,500		2,32,500

Adjustments:

i) Closing stock is Rs.32,000.

ii) Depreciate Computer @10%.; Buildings @ 5%.; Furniture and Fittings @ 10%

iii) Provide for bad and doubtful debts @ 5% and for discount on debtors @2%.

iv) Provide interest on drawings @6% and on Capital @ 8%.

Prepare final accounts for the said period after giving effect to the adjustments.

(October - 2002)

(Answer: G.P. Rs.30,000; N.P. Rs.8,376; B/s Rs. 1,37,868)

25. Trial Balance of Mr.Velu as on 31st March 1994.

Particulars	**Debit Rs.**	**Credit Rs.**
Capital		2,00,000
Drawings	3,600	
Buildings	30,000	
Furniture & Fittings	15,000	
Computer	50,000	
Loan from Mr.Ravi at 6%		30,000
Interest on Loan	1,800	
Sales		2,00,000
Loose tools	32,200	
Purchases	1,50,000	
Stock on 1.4.94	50,000	
General Expenses	30,000	
Freight inward	4,000	
Freight outward	2,000	
Commission received		15,000
Sundry Debtors	56,000	
Bank	40,400	
Sundry Creditors		20,000
	4,65,000	4,65,000

Adjustments:

i) Closing stock Rs.64,000.

ii) Depreciate computer at 10%; Buildings at 5%,; Furniture and Fittings at 10%

iii) Provide for Bad and doubtful Debts at 5% and for Discount on Debtors at 2%.

iv) Provide interest on Drawings at 6% and on Capital at 6%.

Prepare Trading and profit and Loss Account and Balance sheet as on 31st March, 1994.

(October - 1994)

(Answer: G.P. Rs. 60,000; N.P. Rs.17,552; B/s Rs.2,75,736)

26. The following balances have been extracted from the books of Mrs.Padma as on 31st March, 2002.

Debit Balances	**Rs.**	**Credit Balances**	**Rs.**
Furniture	30,000	Capital	2,00,000
Cash in Hand	8,000	Commission	14,000
Opening Stock	1,00,000	Sales	6,00,000
Purchases	3,20,000	Creditors	1,00,000
Investments @10%	20,000	Interest	1,500
Drawings	60,000		
Bad debts	12,000		
Salaries	60,000		
Carriage inwards	20,000		
Insurance	12,000		
Rent	26,000		
Debtors	1,80,000		
Advertising	40,000		
Printing & Stationery	12,000		
General Expenses	15,500		
	9,15,500		9,15,500

The following adjustments are to be made:

1. Closing stock was valued at Rs.80,000.
2. Provide for accrued interest on investments Rs.500.
3. Commission received in advance Rs.4,000.
4. A provision for Bad and Doubtful Debts is to be created to the extent of 5% on Sundry Debtors.
5. A provision for discount on Sundry creditors is to be created to the extent of 2% on Sundry creditors.

(Answer: G.P. Rs.2,40,000; N.P. Rs. 67,500; B/s Rs.3,09,500)

27. The Trial Balance of Mrs.Kalpana shows the following balances on March 31, 2001.

Debit Balances	Rs.	Credit Balances	Rs.
Purchases	1,40,000	Capital	2,40,000
Sales Returns	10,000	Sales	3,00,000
Opening Stock	40,000	Discount received	2,000
Discount allowed	4,000	Commission received	8,000
Bank charges	1,000	Sundry Creditors	58,000
Salaries	9,000		
Wages	10,000		
Freight inwards	8,000		
Freight outwards	2,000		
Rent, Rates & Taxes	10,000		
Advertising	12,000		
Cash in hand	2,000		
Plant & Machinery	1,00,000		
Sundry Debtors	1,20,000		
Cash at Bank	1,40,000		
	6,08,000		6,08,000

Adjustment: The Closing stock was valued at Rs.60,000.

You are required to prepare the Profit and Loss Account for the year ending 31st March 2001 and the Balance Sheet as on that date.

(Answer: G.P. Rs. 1,52,000; N.P. Rs. 1,24,000; B/s Rs.4,22,000)

28. From the following Trial Balance of Mr.Joseph, prepare Trading and Profit and Loss Account for the year ended 31st March, 2003 and a Balance Sheet as on that date.

Trial Balance

Particulars	Debit Rs.	Credit Rs.
Capital		1,20,000
Sales		75,000
Purchases	45,000	
Salaries	6,000	
Rent	4,500	
Insurance Premium	900	
Drawings	15,000	
Machinery	84,000	
Bank	13,500	
Cash	13,500	
Stock (1.4.2002)	15,600	
Sundry Debtors	7,500	
Sundry Creditors		10,500
	2,05,500	2,05,500

Adjustments required:

1. Stock on 31.3.2003 Rs. 14,700
2. Salaries unpaid Rs. 1,000

3. Rent paid in advance Rs. 750
4. Create 5% Provision for bad and doubtful debts on Sundry debtors.

(Answer: G.P. Rs. 29,100; N.P. Rs. 17,075; B/s Rs. 1,33,575)

29. The following balances are extracted from the books of Mr.Venugopal as on 31st March 2004. Prepare Trading, Profit and Loss Account and the Balance Sheet.

Particulars	Debit Rs.	Credit Rs.
Capital		1,20,000
General expenses	16,500	
Drawings	16,000	
Commission		11,000
Bank Overdraft		25,000
Cash in Hand	2,500	
Stock (1.4.2003)	1,00,000	
Furniture	80,000	
Purchases	3,00,000	
Sales		5,00,000
Wages	50,000	
Insurance Premium	1,000	
Salaries	15,000	
Sundry Creditors		50,000
Sundry Debtors	1,50,000	
Bills Payable		25,000
	7,31,000	7,31,000

Adjustments:

1. Closing Stock Rs. 1,00,000
2. Write off bad debts Rs. 20,000

3. Create provision for Bad and doubtful debts @ 5%
4. Create provision for discount on debtors @ 2%
5. Create provision for discount on creditors @ 2%

(Answer: G.P. Rs.1,50,000; N.P. Rs.1,00,530; B/s Rs. 3,03,530)

30. The following are the balances extracted from the books of Mrs.Nandhini as on 31.03.2002.

Debit Balances	Rs.	Credit Balances	Rs.
Drawings	40,000	Capital	2,00,000
Cash in Hand	17,000	Sales	1,60,000
Cash at Bank	65,000	Sundry Creditors	45,000
Wages	10,000		
Purchases	20,000		
Stock (1.4.2001)	60,000		
Buildings	1,00,000		
Sundry Debtors	44,000		
Bills Receivable	29,000		
Rent	4,500		
Commission	2,500		
General Expenses	8,000		
Furniture	5,000		
	4,05,000		4,05,000

Adjustments:

1. Closing stock Rs.40,000
2. Interest on Capital at 6% to be provided.
3. Interest on Drawings at 5% to be provided.
4. Wages yet to be paid Rs.1,000
5. Rent Prepaid Rs.900

Prepare Trading and Profit and Loss Account and Balance sheet as on 31.3.2002.

(Answer : G.P. Rs. 1,09,000; N.P. Rs.84,900; B/s Rs. 3,00,900)

31. From the following Trial Balance of Mr. Ravi, prepare Trading and Profit and Loss Account for the year ended 31st March, 2002 and a Balance Sheet as on that date.

Trial Balance

Particulars	Debit Rs.	Credit Rs.
Capital		40,000
Sales		25,000
Purchases	15,000	
Salaries	2,000	
Rent	1,500	
Insurance	300	
Drawings	5,000	
Machinery	28,000	
Bank Balance	4,500	
Cash	2,000	
Stock (1.4.2001)	5,200	
Debtors	2,500	
Creditors		1,000
	66,000	66,000

Adjustments required:

a) Stock on 31.3.02 Rs. 4,900
b) Salaries unpaid Rs. 300
c) Rent paid in advance Rs. 200
d) Insurance prepaid Rs. 90

(Answer: G.P. Rs.9,700; N.P. Rs.5,890; B/s Rs. 42,190)

32. From the following Trial Balance, Prepare Trading, Profit and Loss Account for the year ended 31.3.1981 and a Balance Sheet as on that date.

Trial Balance

Debit Balances	Rs.	Credit Balances	Rs.
Purchases	11,870	Capital	8,000
Debtors	7,580	Bad debts recovered	250
Return inwards	450	Creditors	1,250
Bank deposit	2,750	Return Outwards	350
Rent	360	Bank Overdraft	1,570
Salaries	850	Sales	14,690
Travelling expenses	300	Bills payable	1,350
Cash	210		
Stock (1.4.1980)	2,450		
Discount allowed	40		
Drawings	600		
	27,460		27,460

Adjustments:

a) The closing stock on 31.3.81 was Rs.4,200.

b) Write off Rs.80 as bad debts.

c) Create a provision for bad and doubtful debts at 5% on Sundry debtors.

d) Rent outstanding Rs.120.

(Answer: G.P. Rs. 4,470; N.P Rs. 2,595; B/s Rs. 14,285)

33. The following are the balances extracted from the books of Ganesh as on 31.3.1999. Prepare Trading and Profit and Loss account for the year ending 31.3.1999 and a Balance Sheet as on that date.

Trial Balance as on 31.3.1999

Debit Balances	Rs.	Credit Balances	Rs.
Drawings	4,000	Capital	20,000
Cash at Bank	1,700	Sales	16,000

Cash in Hand	6,500	Sundry Creditors	4,500
Wages	1,000		
Purchases	2,000		
Stock (1.4.1998)	6,000		
Buildings	10,000		
Sundry Debtors	4,400		
Bills receivable	2,900		
Rent	450		
Commission	250		
General expenses	800		
Furniture	500		
	40,500		40,500

The following adjustments are to be made:

a) Stock on 31.3.99 was Rs.4,000.

b) Interest on capital at 6% to be provided.

c) Interest on Drawings at 5% to be provided.

d) Wages yet to be paid Rs.100.

e) Rent prepaid Rs. 50.

(Answer: G.P. Rs.10,900; N.P. Rs. 8,450; B/s Rs.30,050)

34. From the following Trial Balance of Thiru. Rehman as on 31st March 1995, prepare Trading and Profit and Loss account and Balance sheet taking into account the adjustments.

Trial Balance

Debit Balances	Rs.	Credit Balances	Rs.
Land and Building	42,000	Capital	62,000
Machinery	20,000	Sales	98,780
Patents	7,500	Returns outwards	500
Stock (1.4.1994)	5,760	Sundry creditors	15,300
Sundry debtors	14,500		
Purchases	40,675		

Cash at Bank	3,170		
Return Inwards	680		
Wages	8,480		
Fuel & Power	4,730		
Carriage inwards	2,040		
Carriage outwards	3,200		
Salaries	15,000		
General expenses	8,245		
Insurance	600		
	1,76,580		1,76,580

Adjustments:

a) Stock on 31.3.1995 was Rs. 6,800.

b) Salary outstanding Rs.1,500

c) Insurance prepaid Rs.150.

d) Depreciate machinery @ 10% and patents @ 20%.

e) Create a provision of 2% on debtors for bad debts.

(Answer: G.P. Rs. 43,715; N.P. Rs. 11,530; B/s Rs. 90,330).

35. From the following Trial Balance of Tmt.Selvapriya as on 31st March 2005, prepare Trading and Profit and Loss account and Balance sheet taking into account the adjustments.

Trial Balance

Debit Balances	Rs.	Credit Balances	Rs.
Purchases	2,00,000	Capital	3,00.000
Salaries	10,000	Sales	2,50,000
Rent	7,500	Sundry creditors	1,05,000
Insurance premium	1,500		
Drawings	50,000		
Machinery	1,40,000		
Cash at bank	22,500		

Computers	1,25,000		
Furniture	50,000		
Cash	10,000		
Opening Stock	26,000		
Sundry debtors	12,500		
	6,55,000		6,55,000

Adjustments:

1. Closing stock as on 31.3.2005 Rs. 39,000
2. Rent outstanding Rs. 1,000
3. Provide interest on capital @ 10% and on Drawings @ 8%.

(Answer: G.P. Rs. 63,000; N.P. Rs. 17,000; B/s Rs. 3,99,000)

Chapter - 2

ACCOUNTS FROM INCOMPLETE RECORDS

(Single Entry)

Learning Objectives

After studying this chapter, you will be able to :

- ➢ *understand the meaning, definition, features and limitations of single entry system.*
- ➢ *see the relationship between double entry and single entry.*
- ➢ *estimate the capital by preparing statement of affairs.*
- ➢ *determine the profit or loss by preparing the statement of Profit or Loss.*
- ➢ *prepare the final accounts.*

Single Entry System is an incomplete, inaccurate, unscientific and unsystematic system of book keeping. The name of the system itself shows that the double aspects of business transactions are not recorded. This system makes use of Double Entry System partially. It maintains only personal and cash accounts. Real and nominal accounts are not maintained. It is a system, adopted by certain business houses which, for their convenience and more practical approach, reject the strict rules of the double entry system and maintain only the bare essential records. In other words, it is a defective double entry system manipulated to meet the needs of small trading concerns.

According to **Kohler** "Single Entry System is a system of book-keeping in which as a rule, only records of cash and personal accounts are maintained. It is always incomplete double entry varying with circumstances".

Thus, single entry actually refers to incomplete double entry system or the defective double entry system. It is not based on dual aspect concept. Hence it is incomplete, inaccurate and unscientific.

2.1 Features of Single Entry:

1. **Suitable for sole traders and partnership firms:** The single entry system is suitable only for sole traders and partnership firms. Companies cannot keep books on single entry system because of legal provisions.
2. **Only personal accounts and cash accounts are kept:** In this system it is very common to keep only personal accounts and to avoid real and nominal accounts. It also keeps one cash book which mixes up business as well as private transactions.
3. **All transactions are not recorded:** All business transactions are not recorded in the books of account. Some of them are recorded in the books of accounts, certain transactions are noted in the diary and some of them are in the memories.
4. **Lack of uniformity:** This system lacks uniformity as it is a mere adjustment of double entry system, according to the convenience of the individual.
5. **Collection of information from original documents:** It is quite often seen that for information one has to depend on original vouchers. For example to know total purchases and sales, one has to depend on copies of invoices.

6. **Profit only an estimate:** Profit under this system is only an estimate.
7. **True financial position can not be ascertained:** True financial position can not be ascertained as Balance Sheet is not prepared due to the absence of nominal and real accounts.
8. **Not accepted by Tax Authoritiess:** Due to incompleteness, inaccuracy, and unsystematic nature, it is not accepted by tax authorities.

2.2 Limitations of Single Entry:

1. **Incomplete and unscientific method:** This system is incomplete, because real and nominal accounts are not prepared and also due to the fact that the debit and credit aspect of all transactions are not recorded.
2. **Trial Balance can not be prepared:** Quite often this system does not record both the aspects of transactions, therefore, at the end of the year arithmetical accuracy of the books cannot be checked by preparing a trial balance.
3. **Performance of the business cannot be ascertained:** Trading, profit and loss account cannot be prepared and hence the gross profit, net profit and rate of net profit on sales cannot be known.
4. **True financial position cannot be ascertained:** It is very difficult to prepare balance sheet, so the true financial position cannot be ascertained.
5. **Comparison with previous years performance is not possible:** Due to incomplete information and non-availability of previous years' information, comparison between the current and previous years' performance cannot be made. Comparison is required to identify the areas of weakness and rectification.
6. **Unacceptable to tax authorities:** Tax authorities (income tax and sales tax) do not accept accounts prepared according to single entry system for computation of taxes.

7. **Difficulty in obtaining loan:** Accounts prepared according to this system are not accepted by banks and other money lending institutions, so it is very difficult to obtain loan.

8. **Difficult to locate frauds:** It is difficult to locate frauds under this system and so employees may become dishonest and negligent. It encourages misappropriation, fraud and carelessness.

9. **Difficult to determine the price of the business:** Due to the absence of true and reliable net profit or assets and liabilities, it is difficult to determine the price of the business at the time of its sale.

2.3 Differences between Double Entry System and Single Entry System:

Basis of Distinction	Double Entry System	Single Entry System
1. Principle	For every debit there is a corresponding credit and vice versa	Debit and credits do not agree.
2. Recording of transaction	Debit and credit aspects of all transactions are recorded.	Debit and credit aspects of all transactions are not recorded.
3. Nature of accounts maintained	Maintains complete record of personal, real and nominal accounts.	An incomplete record. Only personal and cash accounts are maintained.
4. Trial Balance	Arithmatical accuracy of the records can be checked by preparing a Trial Balance	Trial Balance cannot be prepared.
5. Determination of profit or loss and financial position	A Profit and Loss Account and Balance sheet can be conveniently prepared since the book of accounts present a complete picture.	A Profit & Loss Account and Balance sheet cannot be conveniently prepared since the accounting records are incomplete.
6. Suitability	It is suitable for all types of traders.	It is suitable for only small traders.
7. Dependability	It is the only scientific system of keeping books of accounts.	It is not a system. It is incomplete and unscientific
8. Acceptability	Records are acceptable for the purpose of tax, loans etc.	Records are not acceptable for the purpose of tax claims, loans etc.
9. Internal check	Internal check is possible	Internal check is not possible.

2.4 Distinction between Statement of Affairs and Balance Sheet:

Statement of affairs which looks like a balance sheet differs from the balance sheet in the following respects.

Basis of Distinction	Balance Sheet	Statement of Affairs
1. Objectives	To Know the financial position of the business	To find out the capital of business
2. Accounting method	When accounting is maintained under double entry system, balance sheet is prepared	Statement of affairs is prepared when accounts are maintained under single entry system of accounting
3. Basis of preparation	It is prepared exclu- -sively on the basis of ledger accounts	It is prepared on the basis of some ledger accounts and estimates.
4. Reliability	It is regarded as a reliable statement	It is not regarded as reliable.
5. Missing of Facts	Since both the aspects of all transactions are duly recorded, no chance for missing of facts.	There remains always a possibility for missing of facts, because the accounts are incomplete.

2.5 Methods of ascertaining profit or loss:

When accounts are kept under single entry system, the following methods are adopted to find out profit or loss of the business.

1. Statement of affairs method or Net worth method or Capital comparison method
2. Conversion method

2.5.1 Statement of Affairs Method:

The following procedures are adopted to calculate profit.

Step 1 → **Ascertain opening capital:** A statement of affairs at the beginning of the year is prepared to find out the amount of capital in the beginning. A statement affairs is like a Balance sheet. The difference between assets and liabilities side represents "Opening Capital".

Format of statement of affairs

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	xxxx	Cash in Hand	xxxx
Bills Payable	xxxx	Cash at Bank	xxxx
Outstanding Expenses	xxxx	Sundry Debtors	xxxx
Bank Overdraft	xxxx	Bills Receivable	xxxx
Capital (Balancing figure)	xxxx	Stock in trade	xxxx
		Prepaid Expenses	xxxx
		Fixed Assets	xxxx
	xxxx		**xxxx**

Step 2 → **Ascertainment Closing Capital:** Prepare a statement of affairs (after all adjustments*) at the end of the accounting period, to ascertain closing capital.

Step 3 → **Add** the amount of **drawings** (whether in cash or in kind) to the closing capital.

Step 4 → **Deduct** the amount of **Additional Capital** introduced, from the above, to get Adjusted capital.

Step 5 → **Ascertainment profit or loss** by deducting opening capital from the adjusted closing capital.

Adjusted closing capital = Closing capital + Drawings — Additional capital introduced during the year.

*** Adjustments:** Depreciation, interest on capitals, interest on drawings, Provision for Bad debts etc.

Statement of Profit or Loss for the year ______

		Rs.
	Closing Capital	x x x
Add:	Drawings	x x x
		x x x
Less:	Additional capital introduced	x x x
	Adjusted closing capital	x x x
Less:	Opening capital	x x x
Net Profit or loss for the year		x x x

Note : If adjusted closing capital is more than opening capital = Profit
If adjusted closing capital is less than opening capital = Loss

Illustration : 1

Find out profit or loss from the following information.

	Rs.
Opening Capital	4,00,000
Drawings	90,000
Closing Capital	5,00,000
Additional Capital during the year	30,000

Solution:

Statement of profit or loss

		Rs.
	Closing capital	5,00,000
Add:	Drawings	90,000
		5,90,000
Less:	Additional Capital	30,000
	Adjusted closing capital	5,60,000
Less:	Opening capital	4,00,000
	Profit for the year	1,60,000

Illustration : 2

Calculate the missing information from the following.

	Rs.
Profit made during the year	4,800
Capital at the end	?
Additional Capital introduced during the year	4,000
Drawings	2,400
Capital in the beginning	9,600

Solution:

	Rs.
Closing capital (Balancing figure)	16,000
Add: Drawings	2,400
	18,400
Less: Additional Capital	4,000
Adjusted closing capital	14,400
Less: Opening capital	9,600
Profit made during the year	4,800

Ans: Capital at the end Rs.16,000.

Note:

Step 1 → Add Profit of Rs.4,800 with opening capital Rs.9,600 = Adjusted closing capital Rs.14,400.

Step 2 → Add Additional capital of Rs.4,000 with Adjusted closing capital Rs.14,400 = Rs.18,400

Step 3 → Deduct drawings Rs.2,400 from the total amount arrived (Step 2) Rs. 18,400 = Closing capital Rs.16,000.

Illustration : 3

Mr.Suresh started business with Rs.2,00,000 on 1st April 2003. His books are kept under single entry. On 31st March, 2004 his position ws as under:

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	40,000	Cash in Hand	6,000
Bills Payable	5,000	Cash at Bank	10,000
Outstanding creditors	7,500	Furniture	30,000
		Plant & Machinery	1,00,000
		Sundry Debtors	50,000
		Stock	90,000
		Bills Receivable	15,000

Ascertain the profit or loss made by Mr.Suresh for the year ended 31st March 2004.

Solution:

Calculation of closing capital:

Statement of affairs of Mr.Suresh as on 31.3.2004

Liabilities	Rs.	Assets	Rs.
Sundry creditors	40,000	Cash in hand	6,000
Bills payable	5,000	Cash at Bank	10,000
Outstanding creditors	7,500	Furniture	30,000

		Plant & Machinery	1,00,000
		Sundry Debtors	50,000
		Stock	90,000
Closing capital (Balancing figure)	2,48,500	Bills receivable	15,000
	3,01,000		**3,01,000**

Statement of profit or loss for the year ended 31.3.2004

	Rs.
Closing capital	2,48,500
Less: Opening capital	2,00,000
Profit for the year	48,500

Illustration : 4

Prakash keeps his books by 'Single Entry System'. His position on 1.4.2003 and 31.3.2004 was as follows:

	1.4.2003 Rs.	**31.3.2004 Rs.**
Cash	500	6,000
Bank Balance	10,000	15,000
Stock	7,000	10,000
Sundry Debtors	30,000	40,000
Furniture	6,000	6,000
Sundry Creditors	6,000	12,000

He introduced an additional capital of Rs.8,000 during the financial year. He withdrew Rs.14,000 for domestic purpose. Find out the profit for the year ended 31.3.2004.

Solution:

i) Calculation of opening capital:

Statement of affairs of Mr.Prakash as on 1.4.2003

Liabilities	Rs.	Assets	Rs.
Sundry creditors	6,000	Cash	500
		Bank Balance	10,000
		Stock	7,000
		Sundry Debtors	30,000
		Furniture	6,000
Opening Capital (Balancing figure)	47,500		
	53,500		53,500

ii) Calculation of Closing Capital:

Statement of affairs of Mr.Prakash as on 31.3.2004

Liabilities	Rs.	Assets	Rs.
Sundry creditors	12,000	Cash	6,000
		Bank Balance	15,000
		Stock	10,000
		Sundry Debtors	40,000
		Furniture	6,000
Closing capital (Balancing figure)	65,000		
	77,000		77,000

Statement of Profit or Loss for the period ended 31.3.2004

		Rs.
	Closing capital	65,000
Add:	Drawings	14,000
		79,000
Less:	Additional capital	8,000
	Adjusted closing capital	71,000
Less:	Opening capital	47,500
Profit for the year 2003-2004		23,500

Illustration : 5

Mrs. Vanitha keeps her books on singly entry basis. Find out the profit or loss made for the period ending 31.3.2004.

Assets & Liabilities	1.4.2003 Rs.	31.3.2004 Rs.
Bank Balance	3,500 (Cr.)	4,500 (Dr.)
Cash on hand	200	300
Stock	3,000	4,000
Sundry Debtors	8,500	7,600
Plant	20,000	20,000
Furniture	10,000	10,000
Sundry Creditors	15,000	18,000

Mrs.Vanitha had withdrawn Rs.10,000 for her personal use and had introduced fresh capital of Rs.4,000. A provision of 5% on debtors is necessary. Write off depreciation on plant at 10% and furniture at 15%.

Solution:

i) Calculation of Opening Capital:

Statement of affairs of Mrs.Vanitha as on 1.4.2003

Liabilities	Rs.	Assets	Rs.
Bank Balance (O/d)	3,500	Cash on hand	200
Sundry Creditors	15,000	Stock	3,000
		Sundry Debtors	8,500
		Plant	20,000
Opening capital (Balancing figure)	23,200	Furnitue	10,000
	41,700		41,700

ii) Calculation of closing capital

Statement of affairs of Mrs.Vanitha as on 31.3.2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry Creditors		18,000	Bank balance		4,500
			Cash on hand		300
			Stock		4,000
			Sundry Debtors	7,600	
			Less: Provision	380	7,220
			Plant	20,000	
Closing capital		24,520	Less: Depreciation	2,000	18,000
(Balancing figure)			Furniture	10,000	
			Less: Depreciation	1,500	8,500
		42,520			42,520

Statement of Profit or loss for the period ended 31.3.2004

		Rs.
	Closing capital	24,520
Add:	Drawings	10,000
		34,520
Less:	Additional capital	4,000
	Adjusted closing capital	30,520
Less:	Opening capital	23,200
Profit made during the year		7,320

Illustration 6:

Ram and Laxman are equal partners in a business in which the books are kept by single entry. On 1.4.2004 their position was as under:

Liabilities	Rs.	Assets	Rs.
Capital accounts:		Cash in hand	5,000
Ram 2,50,000		Cash at bank	15,000
Laxman 2,50,000	5,00,000	Bills receivable	30,000
Bills payable	20,000	Stock	1,00,000
Sundry Creditors	30,000	Sundry Debtors	25,000
		Furniture	1,25,000
		Plant & Machinery	2,50,000
	5,50,000		5,50,000

On 31.3.2005 their position was as under:

	Rs.
Cash in hand	2,000
Sundry Creditors	35,000
Sundry Debtors	30,000
Bills receivable	26,000
Cash at Bank	10,000
Stock	1,10,000
Bills payable	10,000

Plant & Machinery and furniture are to be depreciated by 10%.

Drawings :	Ram	30,000
	Laxman	25,000

Ascertain the profit for the year ended 31.3.2005.

Solution:

Calculation of closing capital:

Statement of affairs of Ram & Laxman as on 31.3.2005

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Sundry creditors		35,000	Cash in hand		2,000
Bills payable		10,000	Cash at bank		10,000
			Sundry debtors		30,000
			Bills receivable		26,000
			Stock		1,10,000
Closing capital		4,70,500	Plant & Machinery	2,50,000	
(Combined capital			Less: Depreciation	25,000	2,25,000
of Ram & Laxman)			Furniture	1,25,000	
			Less: Depreciation	12,500	1,12,500
		5,15,500			5,15,500

Statement of profit or loss for the year ended 31.3.2005

			Rs.
	Combined closing capital		4,70,500
Add:	Drawings:		
	Ram	30,000	
	Laxman	25,000	55,000
	Adjusted closing capital		5,25,500
Less:	Combined opening capital		5,00,000
Profit for the year			25,500

2.5.2 Conversion Method : (Conversion of single entry into double entry system)

If it is desired to calculate profit by preparing Trading and Profit and Loss account under single entry then it is called conversion method. Following steps are necessary to prepare Trading and Profit and Loss account and Balance Sheet from the incomplete information.

Step 1 → **Opening Statement of Affairs:** Prepare statement of affairs in the beginning so as to calculate capital in the beginning.

Step 2 → **Other Accounts:** Then prepare (i) Total debtors account, and (ii) Total Creditors account, to find out credit sales, credit purchases, creditors or debtors balance either in the beginning or at the end.

Step 3 → **Total sales and total purchase:** After preparing these accounts, calculate

(1) **Total sales**, by adding cash sales and credit sales, and

(2) **Total purchases** by adding cash purchases and credit purchases.

Step 4 → **Final Account:** Now prepare Trading, Profit and Loss account and Balance Sheet.

Calculation of Missing Figures:

The information which is needed for preparing the final accounts is not directly available from the incomplete records. Hence, we need to find out such missing figures by preparing relevant accounts. Let us learn how such missing figures can be extracted from incomplete records by preparing the relevant accounts. The important ones are discussed below:

1. Calculation of total purchases or creditors in the beginning or at the end of the year.
2. Calculation of total sales or debtors in the beginning or at the end of the year.

(i) Ascertainment of Total Purchases:

Total purchases are calculated by adding cash and credit purchases. Cash purchases, are given in Cash Book. Credit purchases are calculated by preparing total creditors account. The specimen of Total Creditors Account is given below:

Dr. **Total Creditors Account** Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To Cash paid	………	By Balance b/d (Opening Balance)	………
To Discount Received	………	By Credit Purchases (balancing figure)	………
To Purchases Returns	………		
To Balance c/d (Closing Balance)	………		
	………		………

Look at the following illustration and see how total purchases have been found out.

Illustration 7: From the following information, you are required to calculate total purchases:

	Rs.
Cash purchases	17,000
Creditors as on April 1, 2002	8,000
Cash paid to creditors	31,000
Purchases return	1,000
Creditors as on March 31, 2003	13,400

Solution:

Dr. **Total Creditors Account** Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To Cash paid	31,000	By Balance b/d	8,000
To Purchases return	1,000	(Opening Balance)	
To Balance c/d		By Credit Purchases	
(Closing Balance)	13,400	(Balancing Figure)	37,400
	45,400		**45,400**

Total Purchases = Cash purchases + Credit purchases

= 17,000 + 37,400

= Rs. 54,400.

(ii) Ascertainment of Total Sales:

Total sales are calculated by adding cash and credit sales. Cash sales are given in cash book. For ascertaining the amount of credit sales, the total debtors account should be prepared. The specimen of total debtors account is given below:

Dr. **Total Debtors Account** Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To Balance b/d (Op. Bal.)	………	By Cash received	………
To Credit Sales (Bal. Fig.)	………	By Discount Allowed	………
		By Sales Returns	………
		By Balance c/d (Clo. Bal.)	………
	………		………

Illustration 8:

From the following facts you are required to calculate total sales made during the period:

	Rs.		Rs.
Sundry Debtors as on April 1, 2002	20,400	Sundry Debtors as on March 31, 2003	27,600
Cash received from		Cash Sales	56,800
Sundry Debtors	60,800		
Sales Return	5,400		

Dr. **Total Debtors Account** Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To Balance b/d (Op. Bal.)	20,400	By Cash received	60,800
To Credit Sales (Bal. Fig.)	73,400	By Sales Return	5,400
		By Balance c/d (Clo. Bal.)	27,600
	93,800		93,800

Total Sales = Cash Sales + Credit Sales

= Rs. 56,800 + Rs. 73,400

= Rs. 1,30,200

(iii) Ascertainment of balances of sundry debtors and sundry creditors:

If credit sales and credit purchases are given, the opening or closing balances of debtors and/or creditors can be ascertained by preparing total debtors account and total creditors accounts.

Illustration : 9

From the following particulars, calculate closing balances Debtors and Creditors:

	Rs.
Sundry Debtors as on 1.4.2001	28,680
Sundry Creditors as on 1.4.2001	41,810
Credit purchases	1,51,400
Credit sales	1,65,900
Discount earned	5,200
Discount allowed	4,800
Return outwards	7,440
Return inwards	6,444
Cash received from debtors	1,50,536
Cash paid to creditors	1,43,765

Solution:

Dr. **Total Debtors Account** Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To Balance b/d (1.4.2001)	28,680	By Return inwards	6,444
To Credit Sales	1,65,900	By Cash received	1,50,536
		By Discount allowed	4,800
		By Balance c/d (Balancing figures)	32,800
	1,94,580		1,94,580
To Balance b/d	32,800		

Dr. **Total Creditors Account** Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To Return outwards	7,440	By Balance b/d (1.4.2001)	41,810
To Cash paid	1,43,765	By Credit Purchases	1,51,400
To Discount received	5,200		
To Balance c/d (Balancing figures)	36,805		
	1,93,210		1,93,210
		By Balance b/d	36,805

Illustration : 10

From the following details, find out Credit Sales for the year.

	Rs.
Opening balance of Sundry Debtors	30,000
Cash received during the year	2,05,000
Closing balance of Sundry debtors	48,000
Discount allowed	13,000
Goods returned by Customers	14,000

Solution:

Dr. **Total Debtors Account** Cr.

Particulars	Rs.	Particulars	Rs.
To Balance b/d	30,000	By Cash received	2,05,000
To Credit sales	2,50,000	By Discount allowed	13,000
(Balancing figure)		By Sales Return	14,000
		By Balance c/d	48,000
	2,80,000		2,80,000

Illustration : 11

From the following details find out Credit Purchases.

	Rs.
Opening balance of Sundry Creditors	50,000
Closing balance of Sundry Creditors	60,000
Cash paid	2,65,000
Discount received	15,000
Purchase returns	15,000

Solution:

Dr. **Total Creditors Account** Cr.

Particulars	Rs.	Particulars	Rs.
To Cash paid	2,65,000	By Balance c/d	50,000
To Discount received	15,000	By Credit Purchases	3,05,000
To Purchase return	15,000	(Balancing figure)	
By Balance c/d	60,000		
	3,55,000		3,55,000

Illustration : 12

Find out total purchases and total sales from the following details by making necessary accounts:

	Rs.
Opening balance of Sundry debtors	50,000
Opening balance of Sundry creditors	30,000
Cash collected from Sundry debtors	3,00,000
Discount received	1,500
Cash Paid to Sundry creditors	20,000
Discount allowed	5,000
Return inwards	6,000
Return outwards	8,000
Closing balance of Sundry debtors	35,000
Closing balance of Sundry creditors	25,000
Cash Purchases	12,000
Cash Sales	24,000

Solution:

i) Calculation of Credit Sales

Dr. **Total Debtors Account** Cr.

Particulars	Rs.	Particulars	Rs.
To Balance b/d	50,000	By Cash received	3,00,000
		By Discount allowed	5,000
To Credit Sales (Balancing figure)	2,96,000	By Returns Inwards	6,000
		By Balance c/d	35,000
	3,46,000		3,46,000

ii) Calculation of Credit Purchases

Dr. **Total Creditors Account** Cr.

Particulars	Rs.	Particulars	Rs.
To Discount received	1,500	By Balance b/d	30,000
To Cash paid	20,000		
To Return outwards	8,000		
To Balance c/d	25,000	By Credit Purchases (Balancing figure)	24,500
	54,500		54,500

Total Purchases = Cash purchases + Credit Purchases
= Rs. 12,000 + Rs. 24,500
= Rs. 36,500

Total Sales = Cash sales + Credit sales
= Rs. 24,000 + Rs. 2,96,000
= Rs. 3,20,000

Illustration : 13

Mr.James commenced business on 1.4.2004 with a Capital of Rs.75,000. He immediately bought furniture for Rs.12,000. During the year, he borrowed Rs.15,000 from his wife as loan. He has withdrawn Rs.21,600 for his family expenses. From the following particulars you are required to prepare Trading and Profit & Loss A/c and Balance Sheet as on 31.3.2005.

	Rs.
Cash received from Sundry debtors	1,21,000
Cash paid to Sundry creditors	1,75,000
Cash Sales	1,00,000
Cash Purchases	40,000
Carriage inwards	4,500
Discount allowed to Sundry debtors	4,000
Salaries	5,000
Office Expenses	4,000
Advertisement	5,000
Closing balance of Sundry debtors	75,000
Closing balance of Sundry creditors	50,000
Closing Stock	35,000
Closing cash balance	43,900

Provide 10% depreciation on furnitures

Solution:

i) Calculation of Credit Sales

Dr. **Total Debtors Account** Cr.

Particulars	Rs.	Particulars	Rs.
To Balance b/d	---	By Cash received	1,21,000
		By Discount allowed	4,000
To Credit sales (Balancing figure)	2,00,000	By Balance c/d	75,000
	2,00,000		2,00,000

ii) Calculation of Credit Purchases

Dr. **Total Creditors Account** Cr.

Particulars	Rs.	Particulars	Rs.
To Cash paid	1,75,000	By Balance b/d	--
To Balance c/d	50,000	By Credit Purchases Credit (Balancing Figure)	2,25,000
	2,25,000		2,25,000

Trading and Profit and Loss Account
Dr **of Mr.James for the year ended 31.3.2005** Cr

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening Stock		---	By Sales		
To Purchases:			Cash	1,00,000	
Cash	40,000		Credit	2,00,000	
Credit	2,25,000				3,00,000
		2,65,000			
To Carriage inwards		4,500	By Closing Stock		35,000
To Gross Profit c/d		65,500			
		3,35,000			3,35,000
To Discount allowed		4,000	By Gross Profit b/d		65,500
To Salaries		5,000			
To Office expenses		4,000			
To Advertisement		5,000			
To Depreciation on furniture		1,200			
To Net Profit (transferred to Capital A/c)		46,300			
		65,500			65,500

Balance Sheet of Mr.James as on 31.3.2005

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Capital	75,000		Furniture	12,000	
Add: Net Profit	46,300		Less: Depreciation	1,200	10,800
	1,21,300				
Less: Drawings	21,600	99,700	Sundry Debtors		75,000
Loan from wife		15,000	Closing Stock		35,000
Sundry Creditors		50,000	Cash		43,900
		1,64,700			1,64,700

Illustration : 14

Mrs.Malathy maintained her account books on single entry system. On 1.4.2003 her capital was Rs.2,50,000.

Additional information:

	Rs.
Opening stock	1,25,000
Cash received from Sundry debtors	25,000
Cash sales	1,00,000
Cash paid to Sundry creditors	30,000
Opening Sundry debtors	20,000
Opening Sundry creditors	91,500
Business expenses	60,400
Free hold premises (31.3.2004)	2,00,000
Furniture (31.3.2004)	3,600
Closing stock	1,30,000
Closing Sundry debtors	40,000
Closing Sundry creditors	1,00,000
Closing cash balance	27,500

Prepare trading and profit & loss account for the year ended 31.03.2004 and balance sheet as on that date.

Solution:

i) Calculation of credit sales:

Dr **Total Debtors Account** Cr

Particulars	Rs.	Particulars	Rs.
To Balance b/d	20,000	By Cash received	25,000
To Credit Sales	45,000	By Balance c/d	40,000
(Balancing figure)			
	65,000		65,000

ii) Calculation of credit purchases:

Dr **Total Creditors Account** Cr

Particulars	Rs.	Particulars	Rs.
To Cash paid	30,000	By Balance b/d	91,500
To Balance c/d	1,00,000	By Credit Purchases (Balancing figure)	38,500
	1,30,000		1,30,000

Trading and Profit & Loss Account of Mrs.Malathy

Dr **for the year ended 31.3.2004** Cr

Particulars	Rs.	Particular		Rs.
To Opening stock	1,25,000	By Sales:		
To Purchases - Credit	38,500	Cash	1,00,000	
To Gross Profit c/d	1,11,500	Credit	45,000	1,45,000
		By Closing stock		1,30,000
	2,75,000			2,75,000
To Business expenses	60,400	By Gross Profit b/d		1,11,500
To Net profit	51,100			
(Transferred to capital A/c)				
	1,11,500			1,11,500

Balance Sheet of Mrs.Malathy as on 31.3.2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Capitl	2,50,000		Free hold premises		2,00,000
Add: Net profit	51,100		Furniture		3,600
		3,01,100	Closing stock		1,30,000
Sundry Creditors		1,00,000	Sundry Debtors		40,000
			Cash in hand		27,500
		4,01,100			4,01,100

Illustration 15:

From the following details, prepare Trading and Profit & Loss account for the period ended 31.3.2004 and a Balance sheet on that date.

	As on 1.4.2003	As on 31.3.2004
Stock	50,000	25,000
Sundry Debtors	1,25,000	1,75,000
Cash	12,500	20,000
Furniture	5,000	5,000
Sundry Creditors	75,000	87,500

Other Details:

	Rs.
Drawings	20,000
Discount received	7,500
Discount allowed	5,000
Sundry expenses	17,500
Cash paid to creditors	2,25,000
Cash received from debtors	2,67,500
Sales return	7,500
Purchase return	2,500
Cash sales	2,500

Solution:

i) Calculation of opening capital:

Statement of affairs as on 1.4.2003

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	75,000	Stock	50,000
		Sundry Debtors	1,25,000
		Cash	12,500
Opening capital (Balancing figure)	1,17,500	Furniture	5,000
	1,92,500		1,92,500

ii) Calculation of Credit Sales:

Total Debtors Account

Dr Cr

Particulars	Rs.	Particulars	Rs.
To Balance b/d	1,25,000	By Discount allowed	5,000
To Credit sales	3,30,000	By Cash received	2,67,500
(Balancing figure)		By Sales returns	7,500
		By Balance c/d	1,75,000
	4,55,000		4,55,000

iii) Calculation of Credit Purchases:

Dr **Total Creditors Account** Cr

Particulars	Rs.	Particulars	Rs.
To Discount received	7,500	By Balance b/d	75,000
To Cash paid	2,25,000	By Credit purchases	2,47,500
To Purchases return	2,500	(Balancing figure)	
To Balance c/d	87,500		
	3,22,500		3,22,500

Trading and Profit and Loss Account for the year ended 31.3.2004

Dr Cr

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To Opening stock		50,000	By Sales:		
To Purchases	2,47,500		Cash 2,500		
Less: Purchase			Credit 3,30,000		
Returns	2,500			3,32,500	
		2,45,000	Less: Sales		
To Gross Profit c/d		55,000	Returns	7,500	
					3,25,000
			By Closing Stock		25,000
		3,50,000			3,50,000
To Discount allowed		5,000	By Gross Profit b/d		55,000
To Sundry Expenses		17,500	By Discount received		7,500
To Net Profit (Transferred to Capital A/c)		40,000			
		62,500			62,500

Balance Sheet as on 31.3.2004

Liabilities	Rs.	Rs.	Assets	Rs.	Rs.
Capital	1,17,500		Furniture		5,000
Add: Net Profit	40,000		Sundry Debtors		1,75,000
	1,57,500		Closing Stock		25,000
Less: Drawings	20,000		Cash		20,000
		1,37,500			
Sundry Creditors		87,500			
		2,25,000			2,25,000

QUESTIONS

I. Objective Type:

a) Fill in the blanks:

1. Incomplete records are those records which are not kept under ________ system.
2. Statement of affairs method is also called as ________ method.
3. ________ capital can be found by preparing a statement of affairs at the beginning of the year.
4. A statement of affairs resembles a ________.
5. Closing capital can be found by preparing a statement affairs at the ________ of the year.
6. In ________ system, only personal and cash accounts are opened.
7. Credit purchase can be ascertained as the balancing figure in the ________.

8. The excess of assets over liabilities is ________.

9. The total assets of a proprietor are Rs.5,00,000. His liabilities Rs.3,50,000. Then his capital in the business is ________.

10. A firm has assets worth Rs.60,000 and capital Rs.45,000. Then it's liabilities is ________.

(Answer: 1) Double Entry; 2) Net worth; 3) Opening; 4) Balance Sheet; 5) end; 6) Single entry; 7) Total creditors A/c.; 8) Capital; 9) Rs. 1,50,000; 10) Rs.15,000)

b) Choose the Correct Answer:

1. Under the networth method the basis for ascertaining the profit is
   a) the difference between the capital on two dates.
   b) the difference between the liabilities on two dates.
   c) the difference between the gross assets on two dates.

2. Incomplete records are generally used by
   a) Small traders b) Company c) Government

3. Credit sales is obtained from
   a) Bills Receivable account b) Total debtors account
   c) Total creditors account

4. Single Entry System is
   a) a Scientific method b) an Incomplete Double Entry System
   c) None of the above.

5. The capital of a business is ascertained by preparing
   a) Trading account b) Statement of profit or loss
   c) Statement of affairs

(Answers: 1.(a); 2.(a); 3.(b); 4. (b); 5.(c))

II. Other Questions:

1. What is the meaning for incomplete records?
2. Define Single Entry System.
3. What are the features of Single Entry?
4. What are the limitations of Single Entry System?
5. What is networth method?
6. What is conversion method?
7. What is statement of affairs?
8. What are the differences between single entry and Double Entry?
9. Mention the procedure to calculate profit by statement of affairs method.
10. Mention the procedure to calculate profit by conversion method.

III. Problems:

Statement of Affairs method:

1. What shall be the profits of the concern if:

Opening capital	Rs.	1,60,000
Closing capital	Rs.	1,80,000
Drawings	Rs.	36,000
Additional Capital	Rs.	10,000

(Answer: Rs.46,000)

2. Calculate the missing information:

Closing capital	Rs.	32,000
Drawings	Rs.	4,800
Additional Capital	Rs.	8,000
Profit made during the year	Rs.	9,600

(Answer: Opening capital Rs.19,200)

3. Calculate the missing information when there is no drawings:

Capital at the end	Rs.	91,000
Capital in the beginning	Rs.	35,000
Profits made during the year	Rs.	14,000

(Answer: Capital introduced Rs.42,000)

4. Calculate the missing information:

Closing capital	Rs.	1,63,800
Additional Capital	Rs.	42,300
Drawings	Rs.	25,200
Loss	Rs.	12,600

(Answer: Opening Capital Rs.1,59,300)

5. Mr.Rajesh maintains his books on single entry system. He gives you the following information.

	Rs.
Capital as on 1.4.2003	4,80,000
Capital as on 31.3.2004	5,40,000
Drawings during the financial year	1,50,000
Capital introduced during the financial year	90,000

You are required to calculate profit or loss made by Mr.Rajesh during 2003 - 04.

(Answer: Profit Rs. 1,20,000)

6. Calculate the missing information:

	Rs.
Capital in the beginning	24,000
Profits made during the year	9,000
Capital introduced during the year	12,000
Capital at the end	39,000

(Answer: Drawings Rs.6,000)

7. Calculate the missing information:

Drawings	Rs.	50,000
Additional Capital	Rs.	10,000
Opening Capital	Rs.	1,00,000
Profit made during the year	Rs.	25,000

(Answer: Closing capital Rs.85,000)

8. Find out the profit of the business for the year 1996 from the particulars given below:

	Rs.
Capital on 1.4.1996	30,000
Capital introduced during 1996	6,000
Capital as on 31.3.1997	42,000
Drawings	3,000

(Answer: Profit Rs.9,000 - October 2000)

9. Calculate the missing figure:

	Rs.
Profit made during the year	2,500
Capital at the end	6,000
Capital introduced during the year	2,000
Drawings	1,200
Capital at the beginning	?

(Answer: Rs.2,700 - Oct. 2001)

10. Calculate the missing figure:

	Rs.
Capital at the beginning	15,000
Profits made during the year	8,000
Capital at the end	20,000
Drawings	?

(Answer: Rs.3,000 - March 2002)

11. Mrs. Sheela keeps her books by single entry. She started business on 1st April 2002 with Rs. 3,00,000. On 31st March 2003 her position was as under:

	Rs.
Cash in hand	8,000
Sundry Creditors	50,000
Cash at Bank	20,000
Bills payable	10,000
Furniture	40,000
Outstanding expenses	8,000
Plant	2,00,000
Sundry Debtors	1,50,000
Stock	1,50,000
Bills Receivable	15,000

Ascertain the profit or loss made by Mrs.Sheela during 2002 – 03.

(Answer: Profit Rs. 2,15,000)

12. Mrs.Revathi started business with Rs.1,20,000 as capital on 1.4.2003. During the year she has withdrawn at the rate of Rs.1,000 per month. She introduced Rs.20,000 as additional capital. Her position on 31.3.2004 was as follows:

	Rs.
Bank balance	8,000
Stock	80,000
Sundry Debtors	50,000
Furniture	2,500
Cash in hand	2,000
Sundry Creditors	25,000
Expenses outstanding	1,000

She keeps her books under single entry system. Determine her profit or loss for the year 2003-04.

(Answer: Loss Rs.11,500)

13. Mr.Murali keeps his books under single entry system. Assets and liabilities on 31.3.2002 and 31.3.2003 stood as follows:

	31.3.2002 Rs.	31.3.2003 Rs.
Sundry Creditors	15,000	30,000
Furniture	15,000	15,000
Sundry Debtors	75,000	1,00,000
Stock	35,000	50,000
Cash Balance	5,000	60,000

He introduced an additional capital of Rs.15,000 during the year. He withdrew Rs.35,000 for domestic purpose. Find out the profit or loss for 2002-03.

(Answer: Profit Rs.1,00,000)

14. The balances appear in Bharanidharans' books which are kept on single entry basis:

	1st April, 2000 Rs.	31st March 2001 Rs.
Furniture	2,000	2,000
Stock	5,000	6,000
Sundry Debtors	6,000	4,000
Cash	10,000	20,000
Sundry Creditors	2,000	3,500
Bills receivable	1,000	500
Loan (Dr)	—	1,000
Investment	—	4,000

His drawings during the year were Rs.2,000. Depreciate furniture by 10% and provide a reserve for bad and doubtful debts at 5% on Sundry debtors.

Prepare a statement showing profit for the year.

(Answer : Profit Rs.13,600 – Mar. 2002)

15. Vijayan maintains books on single entry. He gives you the following information:

	1st April, 2001 Rs.	31st March, 2002 Rs.
Cash in hand	4,000	6,000
Cash at Bank	2,000	4,000
Stock in trade	24,000	24,000
Furniture	6,000	10,000
Sundry debtors	20,000	25,000
Sundry creditors	10,000	14,000

He has taken Rs.4,000 from the business to meet his personal expenses. Depreciate furniture by 10% p.a.

Prepare a statement showing profit or loss for the year.

(June - 2002)

(Answer: Profit Rs.12,000)

Hint: Depreciation is calculated for one year on opening balance and for the difference Rs.4,000 for six months.

16. A trader has not kept proper books of accounts. His position as on 31.3.2003 and 31.3.2004 was as follows:

	31.3.2003 Rs.	31.3.2004 Rs.
Cash at Bank	75,000	50,000
Cash in hand	5,000	10,000
Stock	5,00,000	3,25,000
Sundry Debtors	2,00,000	4,00,000
Furniture	50,000	50,000
Machinery	4,00,000	4,00,000
Sundry Creditors	6,00,000	7,00,000

During the year he introduced Rs.1,00,000 as additional capital and withdrew Rs.10,000 per month for domestic purpose. Depreciate furniture and machinery by 10% per year. Ascertain profit or loss for the year ended 31.3.2004.

(Answer: Loss Rs.1,20,000)

17. Vani and Veni were partners sharing profits and losses equally. The accounts are maintained on single entry system. On 31.3.2002 their position was as follows:

Liabilities	Rs.	Assets	Rs.
Sundry Creditors	1,00,000	Cash at Bank	40,000
Loan	40,000	Sundry Debtors	1,60,000
Capital:		Stock	40,000
Vani	80,000	Plant & Machinery	60,000
Veni	80,000		
	3,00,000		3,00,000

The position of the firm on 31.3.2003 was follows:

	Rs.
Sundry Creditors	1,20,000
Stock	80,000
Plant & Machinery	1,00,000
Sundry Debtors	1,50,000
Cash at Bank	60,000

Depreciate plant & Machinery by 10% p.a.

Drawings: Vani Rs.10,000; Veni Rs.6,000.

Find out the profit or loss made during the year 2002-03.

(Answer: Profit Rs.1,18,000)

Conversion method:

18. From the following, find out credit sales:

	Rs.
Opening Sundry debtors	50,000
Cash received from Sundry debtors	80,000
Discount allowed to Sundry debtors	2,000
Sales return	5,000
Closing Sundry debtors	75,000

(Answer : 1,12,000)

19. From the following details, calculate credit sales made during the year 2004.

	Rs.
Sundry Debtors (1.4.2004)	87,125
Sundry Debtors (31.3.2005)	76,500
Cash received from Sundry debtors	2,46,000
Sales return	18,500
Discount allowed	9,000

(Answer : Rs. 2,62,875)

20. Calculate Closing Sundry debtors :

	Rs.
Opening Sundry debtors	2,00,000
Credit Sales	7,00,000
Cash received from Sundry debtors	3,00,000
Returns inward	5,000

(Answer: Rs. 5,95,000)

21. From the following details, find out credit purchases:

	Rs.
Opening Sundry creditors	75,000
Closing Sundry creditors	90,000
Cash paid to Sundry creditors	22,500
Discount received	15,000
Purchased returns	7,500

(Answer: Rs. 60,000)

22. From the following details, calculate the Sundry debtors at the end.

	Rs.
Sundry Debtors (1.1.2000)	17,425
Credit sales	60,075
Cash received from Sundry Debtors	49,200
Sales Returns	3,700
Discount allowed	4,300
Cash sales	12,000

(Answer: Clo. Drs. Rs. 20,300)

23. Calculate the Sundry debtors at the end.

	Rs.
Opening Sundry Debtors	40,000
Total sales	1,60,000
Cash sales	20,000
Cash received from Sundry Debtors	78,000
Returns Inward	5,000

(Answer: Clo. Drs. Rs. 97,000)

24. From the following, find out Sundry creditors at the end.

	Rs.
Opening Sundry creditors	19,000
Cash paid to Sundry creditors	40,000
Discount received	1,000
Return outwards	4,800
Credit purchases	51,200

(Answer: Clo. Crs. Rs. 24,400)

25. Find out total purchases and total sales from the following details by preparing necessary accounts:

	Rs.
Opening Sundry debtors	1,00,000
Opening Sundry creditors	65,000
Cash received from Sundry debtors	5,90,000
Discount received	3,000
Cash paid to Sundry creditors	40,000
Discount allowed	5,000
Returns outward	10,000
Returns inward	6,000
Closing Sundry debtors	70,000
Closing Sundry creditors	50,000
Cash sales	50,000
Cash purchases	25,000

(Answer: Total Sales Rs. 6,21,000; Total Purchases Rs. 63,000)

26. From the following particulars calculate closing balance of Sundry debtors and Sundry creditors.

	Rs.
Sundry debtors as on 1.4.2002	30,000
Sundry creditors as on 1.4.2002	41,000
Credit purchases	1,50,000
Credit sales	1,70,000
Discount earned	5,000
Discount allowed	6,000
Purchase returns	7,500
Sales returns	6,500
Cash received from Sundry debtors	1,50,000
Cash paid to Sundry creditors	1,40,000

(Answer: Clo. Drs. Rs.37,500; Clo. Crs. Rs.38,500)

27. Mr.Kannan started business with Rs.2,62,500 on 1.4.2003. He bought furniture for Rs.42,000. He borrowed Rs.52,500 from bank. He had withdrawn for personal expenses Rs.75,600. From the details given below prepare Trading and Profit and Loss account and Balance Sheet on 31.4.2004.

	Rs.
Credit sales	7,00,000
Cash sales	3,50,000
Credit purchases	7,87,500
Cash purchases	1,40,000
Wages	15,750
Discount allowed	3,500
Salaries	17,500
Business expenses	14,000
Advertisement	17,500
Closing Sundry debtors	2,62,500
Closing Sundry creditors	1,75,000
Closing stock	1,22,500
Closing cash balance	1,64,150

Depreciation to be provided on furniture @ 10%.

(Answer: Cash receipts from Drs. Rs.4,34,000; Cash payments to Crs. Rs.6,12,500; G.P. Rs.2,29,250; N.P. Rs.1,72,550; B/s Rs.5,86,950)

28. Mrs.Pramila maintained her account books on single entry system. From the following information available in her records, prepare Trading, Profit and Loss account for the year ending 31.3.2003 and a Balance Sheet as on that date, depreciating machinery at 10% per annum.

Cash Book

Receipts	Rs.	Payments	Rs.
To Balance b/d	16,000	By (Cash) Purchases	28,000
To (Cash) Sales	80,000	By Sundry Creditors	40,000
To Sundry Debtors	60,000	By General Expenses	12,000
		By Wages	4,000
		By Drawings	16,000
		By Balance c/d	56,000
	1,56,000		1,56,000

Other Information:

	31.3.2002 Rs.	31.3.2003 Rs.
Sundry Debtors	18,000	????
Sundry Creditors	28,800	????
Stock	20,000	32,000
Machinery	80,000	80,000
Furniture	6,000	6,000
Additional information:		
Discount allowed	2,800	
Discount received		3,400
Credit Sales	68,800	
Credit purchases	28,200	

(Answer: Clo. Drs. Rs.24,000; Clo. Crs. Rs.13,600; Op. capital Rs.1,11,200; G.P Rs.1,00,600; N.P. Rs.81,200; B/s Rs.1,90,000)

29. From the following details, prepare Trading and Profit & Loss account and Balance Sheet for the year ended 31.3.04.

	As on 1.4.2003 Rs.	As on 31.3.2004 Rs.
Sundry Stock	50,000	25,000
Sundry Debtors	1,25,000	1,75,000

Furniture	5,000	5,000
Cash	12,500	20,000
Sundry Creditors	75,000	87,500

Other Details:

Discount received	7,500
Discount allowed	5,000
Sundry expenses	15,000
Cash paid to Sundry creditors	2,25,000
Cash received from Sundry debtors	2,67,500
Drawings	20,000
Sales Returns	7,500
Purchase Returns	2,500

Charge depreciation on furniture @ 5%.

(Ans: Op. capital Rs.1,17,500; Cr. Sales Rs.3,30,000; Cr. Purchases Rs.2,47,500; G.P. Rs. 52,500; N.P. Rs.39,750; B/s Rs.2,24,750)

30. From the following information, prepare Trading and Profit and Loss account and a Balance Sheet as on 31.3.98.

	As on 1.4.1997 Rs.	As on 31.3.1998 Rs.
Sundry creditors	37,500	43,750
Furniture	2,500	2,500
Cash	6,250	10,000
Sundry debtors	62,500	87,500
Stock	25,000	12,500

Other Details:

	Rs.
Drawings	10,000
Discount received	3,750
Discont allowed	2,500
Cash received from Sundry debtors	1,35,000
Cash paid to creditors	1,12,500

Sales returns	3,750
Purchase returns	1,250
Sundry expenses paid	8,750
Charge depreciation on furniture	5%

(Ans: Op. Capital Rs.58,750; Cr. sales Rs.1,66,250; Cr. Purchase Rs.1,23,750; G.P. Rs.27,500; N. P. Rs. 19,875; B/s Rs.1,12,375)

31. The books of Mr.Ravishankar revealed the following information on 1.4.2000.

Liabilities	Rs.	Assets	Rs.
Capital	83,030	Goodwill	18,540
Sundry creditors	9,010	Furniture	14,010
		Sundry debtors	46,830
		Cash at bank	12,660
	92,040		92,040

Other information:

	Rs.
Cash received from Sundry debtors	2,12,460
Drawings	81,600
Salaries paid	18,300
Rent paid	9,450
Cash paid to Sundry creditors	90,360
Sundry expenses paid	3,840
Closing stock (31.3.2001)	32,000
Sundry debtors (31.3.2001)	56,700
Sundry creditors (31.3.2001)	16,000
Cash at bank (31.3.2001)	21,570

Prepare Trading account and Profit and Loss account and a Balance Sheet as on 31.3.2001.

(Ans: Cr. sales Rs. 2,22,330; Cr. purchases Rs. 97,350; G.P. Rs.1,56,980; N.P Rs. 1,25,390; B/s Rs.1,42,820)

CHAPTER - 3

DEPRECIATION ACCOUNTING

Learning Objectives

After studying this Chapter, you will be able to:

- *understand the meaning and definition of depreciation.*
- *recognise the reasons and causes for providing depreciation.*
- *identify various methods of depreciation.*
- *determine the profit or loss at the time of sale of asset.*
- *prepare asset account and depreciation account under straight line and written down value methods.*

All assets whose benefit is derived for a long period of time, usually more than one year period are called as **Fixed Assets**. These assets decrease in value year after year due to wear and tear or lapse of time. *This reduction in value of Fixed Assets is called Depreciation.*

Generally, the term *'depreciation' is used to denote decrease in value, but in accounting, this term is used to denote decrease in the book value of a fixed asset.* Depreciation is the permanent and continuous decrease in the book value of a fixed asset due to use,

effluxion of time, obsolescence, expiration of legal rights or any other cause.

For instance, a factory owner, owns a machinery worth Rs.1,00,000, may estimate the life of the machinery as five years. This means that the value of the asset is reducing every year. Hence, it is necessary to spread the cost over five years during which the benefit of the asset is derived. Thus depreciation Rs.20,000 (Rs.1,00,000 / 5 years) is to be treated as an expense, which is debited to Profit and Loss account.

3.1 Definition:

In the words of *Spicer and Pegler,* "Depreciation is the measure of the exhaustion of the effective life of an asset from any cause during a given period".

Carter defines depreciation as "the gradual and permanent decrease in the value of an asset from any cause".

According to ICMA (Institute of Cost and Management Accountants - London) Terminology "Depreciation is the diminution in intrinsic value of asset due to use and / lapse of time".

The above definitions reveal that when fixed assets are used in business to generate income, they lose their production capacity or earning capacity and at a particular point of time they render themselves useless. This reduction in the production capacity or earning capacity is termed as depreciation.

3.2 Need for Providing Depreciation:

The need for providing depreciation in accounting records arises due to any one or more of the following reasons.

1. To ascertain correct profit / loss

For proper matching of cost with revenues, it is necessary to charge depreciation against revenue in each accounting year, to calculate the correct net profit or net loss.

2. To present a true and fair view of the financial position

If the amount of depreciation is not provided on fixed assets in the books of account, the value of fixed assets will be shown at a higher value than it's real value in the balance sheet. As such it will not reflect the true and fair financial position of the business. Hence, to present a true and fair view of the financial position of the business, it is necessary that depreciation must be deducted from the book value of the assets in the balance sheet.

3. To ascertain the real cost of production

For ascertaining the real cost of production, it is necessary to provide depreciation.

4. To comply with legal requirements

As per Section 205(1) of the Companies Act 1956, it is compulsory for companies to provide depreciation on fixed assets before it declares dividend.

5. To replace assets

Depreciation is provided to replace the assets when it becomes useless.

3.3 Causes of Depreciation

Causes of Depreciation

Internal	External
1. Wear and Tear	1. Obsolescence
2. Disuse	2. Effluxion of time
3. Maintenance	3. Time factor
4. Depletion	

The causes of depreciation may be internal or external. The internal causes arise from operation of any cause natural to or inherent in the asset itself. External causes arise from the operation of forces outside the business. These are being discussed below:

I. Internal Causes

1. **Wear and tear:** Wear and tear is an important cause of depreciation in case of tangible fixed asset. It is due to use of the asset.

2. **Disuse:** When a machine is kept continuously idle, it becomes potentially less useful.

3. **Maintenance:** The value of machine deteriorates rapidly because of lack of proper maintenance.

4. **Depletion:** It refers to the physical deterioration by the exhaustion of natural resources eg., mines, quarries, oil wells etc.

II. External Causes

1. **Obsolescence:** The old asset will become obsolete (useless) due to new inventions, improved techniques and technological advancement.

2. **Effluxion of time:** When assets are exposed to forces of nature, like weather, wind, rain, etc., the value of such assets may decrease even if they are not put into any use.

3. **Time Factor:** Lease, copy-right, patents are acquired for a fixed period of time. On the expiry of the fixed period of time, the assets cease to exist.

3.4 Terms used for Depreciation:

1. **Amortization:** This refers to loss in the value of intangible assets such as goodwill, patents and preliminary expenses.

2. **Depletion:** Decrease in the value of mineral wealth such as coal, oil, iron ore, etc. is termed as **depletion**. The more we extract mineral wealth, the more they are depleted.

3. **Obsolescence:** When an asset becomes useless due to new inventions, improved techniques and technological advances, it is termed as **obsolescence**.

3.5 Factors Determining the Amount of Depreciation

1. **Original cost of the asset** It implies the cost incurred on its acquisition, installation, commissioning and for additions or improvements thereof which are of capital nature

2. **Estimated life:** It implies the period over which an asset is expected to be used.

3. **Residual value** : It implies the value expected to be realised on its sale on the expiry of its useful life. This is otherwise known as **scrap value** or **turn-in value**.

3.6 Methods of Calculating Depreciation

1. Straight line method or fixed instalment method.
2. Written down value method or diminishing balance method
3. Annuity method.
4. Depreciation Fund method.
5. Insurance Policy method.
6. Revaluation method.

Let us discuss these methods in detail.

3.6.1 Straight Line Method or Fixed Instalment Method or Original Cost Method

Under this method, the same amount of depreciation is charged every year throughout the life of the asset. The amount and rate of depreciation is calculated as under.

1) Amount of depreciation

$$= \frac{\text{Total cost} - \text{Scrap value}}{\text{Estimated Life}}$$

2) Rate of depreciation

$$= \frac{\text{Amount of Depreciation}}{\text{Original Cost}} \times 100$$

Illustration : 1

A company purchased Machinery for Rs.1,00,000. Its installation costs amounted to Rs.10,000. It's estimated life is 5 years and the scrap value is Rs.5,000. Calculate the amount and rate of depreciation

Solution:

Total cost = Purchase Price + Installation Charges

= Rs.1,00,000 + Rs.10,000

= Rs. 1,10,000

$$\text{Amount of depreciation} = \frac{\text{Total cost} - \text{Scrap value}}{\text{Estimated life}}$$

$$= \frac{\text{Rs.}1,10,000 - \text{Rs.}5,000}{5}$$

$$= \frac{\text{Rs.}1,05,000}{5} = \text{Rs.}21,000$$

$$\text{Rate of depreciation} = \frac{\text{Amount of depreciation}}{\text{Original cost}} \times 100$$

$$= \frac{\text{Rs.}21{,}000}{\text{Rs.}1{,}10{,}000} \times 100$$

$$= 19.09\%$$

Note: Under straight line method, for each of the five years, the amount of depreciation to be charged will be Rs.21,000.

Merits:

1. **Simplicity:** It is very simple and easy to understand.
2. **Easy to calculate:** It is easy to calculate the amount and rate of depreciation.
3. **Assets can be completely written off:** Under this method, the book value of the asset becomes zero or equal to its scrap value at the expiry of its useful life.

Demerits:

The amount of depreciation is same in all the years, although the usefulness of the machine to the business is more in the initial years than in the later years.

3.6.2. Written Down Value Method or Diminishing Balance Method or Reducing Balance Method

Under this method, depreciation is charged at a fixed percentage each year on the reducing balance (i.e., cost less depreciation) of asset. The amount of depreciation goes on decreasing every year. For example, if the asset is purchased for Rs.1,00,000 and depreciation is to be charged at 10% p.a. on reducing balance method, then

Depreciation for the 1st year = 10% on Rs.1,00,000, ie., Rs.10,000

Depreciation for the 2nd year = 10% on Rs.90,000 (Rs.1,00,000 — Rs.10,000)

= Rs. 9,000

Depreciation for the 3rd year = 10% on Rs.81,000 (Rs.90,000 - Rs.9,000)

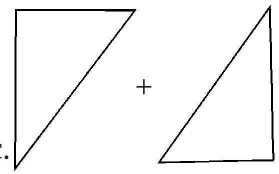
= Rs.8,100 and so on.

Merits:

1. **Uniform effect on the Profit and Loss account of different years:** The total charge (i.e., depreciation plus repairs and renewals) remains almost uniform year after year, since in earlier years the amount of depreciation is more and the amount of repairs and renewals is less, whereas in later years the amount of depreciation is less and the amount of repairs and renewals is more.

Depreciation amount — Repairs & renewals amount

Ist Year
IInd Year
IIIrd Year, etc.



Ist Year
IInd Year
IIIrd Year, etc.

The total charge is more or less equal

2. **Recognised by the Income Tax authorities:** This method is recognised by the Income Tax authorities
3. **Logical Method:** It is a logical method as the depreciation is calculated on the diminished balance every year.

Demerits:

It is very difficult to determine the rate by which the value of asset could be written down to zero.

3.6.3 Annuity Method:

The annuity method considers that the business besides loosing the original cost of the asset in terms of depreciation and also looses interest on the amount used for buying the asset. This is based on the assumption that the amount invested in the asset would have earned in case the same amount would have been invested in some other form of investment. The annual amount of depreciation is determined with the help of annuity table. This method is used to calculate depreciation amount on lease.

3.6.4 Depreciation Fund Method or Sinking Fund Method :

Under this method, funds are made available for the replacement of asset at the end of its useful life. The depreciation remains the same year after year and is charged to Profit and Loss account every year through the creation of depreciation fund. The amount of annual depreciation is invested in good securities bearing interest at a specified rate. The aggregate amount of interest and annual provision is invested every year. When the asset is completely written off or is to be replaced, the securities are sold and the amount so realised by selling securities is used to replace the old asset.

3.6.5 Insurance Policy Method:

According to this method, an Insurance policy is taken for the amount of the asset to be replaced. The amount of the policy is such that it is sufficient to replace the asset when it is worn out. A sum equal to the amount of depreciation is paid as premium every year. The amount goes on accumulating at a certain rate of interest and is received on maturity. The amount so received is used for the purchase of new asset, replacing the old one.

3.6.6 Revaluation Method:

Under this method, the assets like loose tools are revalued at the end of the accounting period and the same is compared with the value of the asset at the beginning of the year. The difference is considered as depreciation.

3.7 Recording Depreciation

Depreciation is directly charged against the asset by debiting Depreciation account and crediting the Asset account. Depreciation account is closed by transferring to Profit and Loss account at the end of the year. The entries will be as under:

1) For the amount of depreciation to be provided at the end of the year:

Depreciation A/c…..	Dr.	with the amount
To Asset A/c.		of depreciation

2) For transferring the amount of depreciation at the end of the year.

Profit and Loss A/c…..	Dr.	with the amount
To Depreciation A/c.		of depreciation
		transferred

Asset Account will be shown at cost less depreciation i.e., written down value at the end of the year in the Balance sheet.

Illustration : 2

Raheem & Co. purchased a fixed asset on 1.4.2000 for Rs.2,50,000. Depreciation is to be provided @10% annually according to the Straight line method. The books are closed on 31st March every year.

Pass the necessary journal entries, prepare Fixed asset Account and Depreciation Account for the first three years.

Solution:

$$\text{Amount of Depreciation} = 2,50,000 \times \frac{10}{100}$$

$$= \text{Rs. } 25,000$$

In the Books of Raheem & Co.

Journal Entries

Date	Particulars		L.F.	Debit Rs.	Credit Rs.
2000 Apr 1	Fixed asset A/c	Dr		2,50,000	
	To Bank A/c				2,50,000
	(Fixed asset purchased)				
2001 Mar 31	Depreciation A/c	Dr		25,000	
	To Fixed asset A/c				25,000
	(Depreciation provided)				
,,	Profit & Loss A/c	Dr		25,000	
	To Depreciation A/c				25,000
	(Depreciation transferred to Profit & Loss A/c)				
2002 Mar 31	Depreciation A/c	Dr		25,000	
	To Fixed asset A/c				25,000
	(Depreciation provided)				
,,	Profit & Loss A/c	Dr		25,000	
	To Depreciation A/c				25,000
	(Depreciation transferred to Profit & Loss account)				
2003 Mar 31	Depreciation A/c	Dr		25,000	
	To Fixed asset A/c				25,000
	(Depreciation provided)				
,,	Profits & Loss A/c	Dr		25,000	
	To Depreciation A/c				25,000
	(Depreciation transferred to Profit & Loss A/c)				

Ledger Accounts

Fixed Asset Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2000 Apr 1	To Bank A/c	2,50,000	2001 Mar 31	By Depreciation A/c	25,000
			,,	By Balance c/d	2,25,000
		2,50,000			2,50,000
2001 Apr 1	To Balance b/d	2,25,000	2002 Mar 31	By Depreciation A/c	25,000
			,,	By Balance c/d	2,00,000
		2,25,000			2,25,000
2002 Apr 1	To Balance b/d	2,00,000	2003 Mar 31	By Depreciation A/c	25,000
			,,	By Balance c/d	1,75,000
		2,00,000			2,00,000
2003 Apr 1	To Balance b/d	1,75,000			

Depreciation Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2001 Mar 31	To Fixed Asset A/c	25,000	2001 Mar 31	By Profit & Loss A/c	25,000
		25,000			25,000
2002 Mar 31	To Fixed Asset A/c	25,000	2002 Mar 31	By Profit & Loss A/c	25,000
		25,000			25,000
2003 Mar 31	To Fixed Asset A/c	25,000	2003 Mar 31	By Profit & Loss A/c	25,000
		25,000			25,000

Illustration : 3

A Company purchased Machinery for Rs.50,000 on 1st April 2002. It is depreciated at 10% per annum on Written Down Value method. The accounting year ends on 31st March of every year.

Pass necessary Journal entries, prepare Machinery account and Depreciation account for three years.

Solution:

Journal Entries

Date	Particulars		L.F.	Debit Rs.	Credit Rs.
2002 Apr 1	Machinery A/c	Dr		50,000	
	To Bank A/c				50,000
	(Machinery purchased)				
2003 Mar 31	Depreciation A/c	Dr		5,000	
	To Machinery A/c				5,000
	(Depreciation provided)				
,,	Profit & Loss A/c	Dr		5,000	
	To Depreciation A/c				5,000
	(Depreciation provided)				
2004 Mar 31	Depreciation A/c	Dr		4,500	
	To Machinery A/c				4,500
	(Depreciation provided)				
,,	Profit & Loss A/c	Dr		4,500	
	To Depreciation A/c				4,500
	(Depreciation transferred to Profit & Loss account)				
2005 Mar 31	Depreciation A/c	Dr		4,050	
	To Machinery A/c				4,050
	(Depreciation provided)				
,,	Profit & Loss A/c	Dr		4,050	
	To Depreciation A/c				4,050
	(Depreciation transferred to Profit and Loss Account)				

Ledger Accounts

Machinery Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2002 Apr 1	To Bank A/c	50,000	2003 Mar 31	By Depreciation A/c	5,000
			,,	By Balance c/d	45,000
		50,000			50,000
2003 Apr 1	To Balance b/d	45,000	2004 Mar 31	By Depreciation A/c	4,500
			,,	By Balance c/d	40,500
		45,000			45,000
2004 Apr 1	To Balance b/d	40,500	2005 Mar 31	By Depreciation A/c	4,050
			,,	By Balance c/d	36,450
		40,500			40,500
2005 Apr 1	To Balance b/d	36,450			

Depreciation Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2003 Mar 31	To Machinery A/c	5,000	2003 Mar 31	By Profit & Loss A/c	5,000
		5,000			5,000
2004 Mar 31	To Machinery A/c	4,500	2004 Mar 31	By Profit & Loss A/c	4,500
		4,500			4,500
2005 Mar 31	To Machinery A/c	4,050	2005 Mar 31	By Profit & Loss A/c	4,050
		4,050			4,050

3.8 Calculation of Profit or Loss on sale of asset:

Some times, a business may dispose an asset when it is worn out. In that case, it is advisable to find the profit or loss on sale of asset. This is done by comparing the selling price with the book value of the asset.

Book value = Cost Price *less* Total Depreciation provided till the date of sale

If the book value is less than theselling price, then it is **Profit on Sale**.

If the book value is more than the selling price, it is **Loss on Sale**.

Illustration : 4

Ram manufacturing company purchased on 1st April 2002, Machinery for Rs.1,00,000. After having used it for three years it was sold for Rs. 85,000. Depreciation is to be provided every year at the rate of 10% per annum on the fixed instalment method. Books are closed on 31st March every year. Find out the profit or loss on sale of machinery.

Calculation of Profit or Loss on Sale of Machinery

		Rs.
	Cost Price	1,00,000
Less:	Depreciation for 2002-03	10,000
		90,000
Less:	Depreciation for 2003-04	10,000
		80,000
Less:	Depreciation for 2004-05	10,000
	Book value on the date of sale	70,000

Selling price is Rs. 85,000.

Book value on the date of sale is Rs. 70,000

As book value is less than selling price the difference is Profit.

= 85,000 – 70,000

∴ Profit on sale of machinery = Rs. 15,000.

Illustration : 5

Robert & Co. purchased a Machinery on 1st April 2002 for Rs.75,000. After having used it for three years it was sold for Rs.35,000. Depreciation is to be provided every year at the rate of 10% per annum on Diminishing balance method. Accounts are closed on 31st March every year. Find out the profit or loss on sale of machinery.

Calculation of Profit or Loss on sale of Machinery

		Rs.
	Cost Price	75,000
Less:	Depreciation for 2002-03	7,500
		67,500
Less:	Depreciation for 2003-04	6,750
		60,750
Less:	Depreciation for 2004-05	6,070
	Book value on the date of sale	54,675

Selling price = Rs. 35,000.

Book value on the date of sale = Rs.54,675.

As book value is greater than selling price the difference is loss.

= 54,675 – 35,000

∴ Loss on sale of Machinery = Rs.19,675.

3.9 Entries for sale of asset:

When the following entries are made:

1. Entry for sale

Bank A/c.... To Asset A/c.	Dr.	With the amount of sale proceeds

2. Entry for depreciation provided during the year of sale.

Depreciation A/c.... To Asset A/c.	Dr.	With the amount of depreciation provided during the year

Note : Depreciation is calculated on the date of sale which may be during the year or end of the year.

3. Entry for the transfer of profit on sale of asset.

Asset A/c.... To Profit & Loss A/c.	Dr.	With the amount of profit on sale of asset.

4. Entry for the transfer of Loss on sale of asset

Profit & Loss A/c.... To Asset A/c.	Dr.	With the amount of Loss on sale of asset.

a) Format of Fixed Asset Account when it is profit on sales

Fixed Asset Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
Date on which Sale is made	To Balance b/d	xxx	Date on which Sale is made	By Depreciation A/c	xxx
	To Profit & Loss A/c (Profit on Sales)	xxx		By Bank A/c	xxx
		xxx			xxx

b) Format of Fixed Asset Account when it is loss on sales

Fixed Asset Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
Year Begin--ning	To Balance b/d	xxx	Date on which Sale is made	By Depreciation A/c	xxx
			,,	By Bank A/c	xxx
			,,	By Profit & Loss A/c (Loss on sale)	xxx
		xxx			xxx

Note: The above format relates only to the year in which sales are made.

Illustration : 6

Deepak Manufacturing Company purchased on 1st April 2002, Machinery for Rs.2,90,000 and spent Rs.10,000 on it's installation. After having used it for three years it was sold for Rs.2,00,000. Depreciation is to be provided every year at the rate of 15% per annum on the Fixed Instalment method.

Pass the necessary journal entries, prepare machinery account and depreciation account for three years ends on 31st March every year.

Solution:

Calculation of profit or loss on sale of machinery

		Rs.
	Cost Price (2,90,000 + 10,000)	3,00,000
Less:	Depreciation for 2002-03 @ 15%	45,000
		2,55,000

Less:	Depreciation for 2003-04 @ 15%	45,000
		2,10,000
Less:	Depreciation for 2004-05 @ 15%	45,000
	Book value as on the date of sale	1,65,000

As book value is less than selling price the difference is Profit.

= Rs.2,00,000 - 1,65,000

∴ Profit is Rs.35,000.

Journal Entries in the books of Deepak Manufacturing Company

Date	Particulars		L.F.	Debit Rs.	Credit Rs.
2002 Apr 1	Machinery A/c To Bank A/c (Machinery Purchased and installation charges paid)	Dr		3,00,000	3,00,000
2003 Mar 31	Depreciation A/c To Machinery A/c (Depreciation Provided)	Dr		45,000	45,000
,,	Profit & Loss A/c To Depreciation A/c (Depreciation transferred to Profit & Loss account)	Dr		45,000	45,000
2004 Mar 31	Depreciation A/c To Machinery A/c (Depreciation provided)	Dr		45,000	45,000
,,	Profit & Loss A/c To Depreciation A/c (Depreciation transferred to Profit and Loss account)	Dr		45,000	45,000

Date	Particulars		L.F.	Debit Rs.	Credit Rs.
2005 Mar 31	Depreciation A/c To Machinery A/c (Depreciation provided)	Dr		45,000	45,000
,,	Profit & Loss A/c To depreciation A/c (Depreciation transferred to Profit & Loss account)	Dr		45,000	45,000
Mar 31	Bank A/c To Machinery A/c (Machinery Sold)	Dr		2,00,000	2,00,000
,,	Machinery A/c To Profit & Loss A/c (Profit on sale of machinery)	Dr		35,000	35,000

Ledger Account

Dr. **Machinery Account** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2002 Apr 1	To Bank A/c	3,00,000	2003 Mar 31	By Depreciation A/c	45,000
			,,	By Balance c/d	2,55,000
		3,00,000			3,00,000
2003 Apr 1	To Balance b/d	2,55,000	2004 Mar 31	By Depreciation A/c	45,000
			,,	By Balance c/d	2,10,000
		2,55,000			2,55,000
2004 Apr 1	To Balance b/d	2,10,000	2005 Mar 31	By Depreciation A/c	45,000
Mar 31	To Profit & Loss A/c (Profit on sale)	35,000	,,	By Bank A/c	2,00,000
		2,45,000			2,45,000

Depreciation Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2003			2003		
Mar 31	To Machinery A/c	45,000	Mar 31	By Profit & Loss A/c	45,000
		45,000			45,000
2004			2004		
Mar 31	To Machinery A/c	45,000	Mar 31	By Profit & Loss A/c	45,000
		45,000			45,000
2005			2005		
Mar 31	To Machinery A/c	45,000	Mar 31	By Profit & Loss A/c	45,000
		45,000			45,000

Illustration : 7

Machinery account showed a balance of Rs.80,000 on 1st April 2001. On 1st October 2003, another machinery was purchased for Rs.48,000. On 30th September 2003, a machinery which has book value Rs.80,000 on 1.4.2001 was sold for the Rs.48,000. Depreciation is to be provided at 10% per annum on Written Down Value Method. The accounting year ends on 31st March.

Prepare Machinery account and Depreciation account for three years.

Solution:

Calculation of Profit or Loss on Sale of Machinery

		Rs.
	Cost of Machinery (1.4.2001)	80,000
Less:	Depreciation for 2001-02	8,000
		72,000
Less:	Depreciation for 2002-03	7,200
		64,800
Less:	Depreciation till the date of sale (30.9.2003)	3,240
	Book value on the date of sale	61,560

As book value is greater than selling price the difference is loss.

= 61,560 — 48,000

∴ Loss = Rs. 13,560

Ledger Accounts
Machinery Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2001			2002		
Apr 1	To Balance b/d	80,000	Mar 31	By Depreciation A/c	8,000
			”	By Balance c/d	72,000
		80,000			80,000
2002			2003		
Apr 1	To Balance b/d	72,000	Mar 31	By Depreciation A/c	7,200
			”	By Balance c/d	64,800
		72,000			72,000
2003			2003		
Apr 1	To Balance b/d	64,800	Sep 30	By Depreciation A/c (for 6 months)	3,240
Oct 1	To Bank A/c	48,000	”	By Bank A/c	48,000
			”	By Profit & Loss A/c (Loss on sale)	13,560
			2004		
			Mar 31	By Depreciation A/c (on new machine for 6 months)	2,400
			”	By Balance c/d	45,600
		1,12,800			1,12,800
2004					
Apr 1	To Balance b/d	45,600			

Depreciation Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2002 Mar 31	To Machinery A/c	8,000	2002 Mar 31	By Profit & Loss A/c	8,000
		8,000			8,000
2003 Mar 31	To Machinery A/c	7,200	2003 Mar 31	By Profit & Loss A/c	7,200
		7,200			7,200
2003 Sep 30	To Machinery A/c	3,240	2004 Mar 31	By Profit & Loss A/c	5,640
2004 Mar 31	To Machinery A/c	2,400			
		5,640			5,640

Illustration : 8

Vimal & Brothers purchased a Machinery for Rs.3,75,000 on 1st July 2002. It is depreciated at 20% per annum on Straight Line Method for three years. Having became obsolete it was sold for Rs.75,000 on 31.3.2005.

Pass the journal entries, prepare Machinery account and Depreciation account. Accounts are closed 31st March every year.

Solution:

Calculation of Profit or loss on sale of Machinery

		Rs.
	Cost of Machinery (1.7.2002)	3,75,000
Less:	Depreciation for 2002-03 (for 9 months at the rate of 20%)	56,250
		3,18,750

Less:	Depreciation for 2003-04	75,000
		2,43,750
Less:	Depreciation for 2004-05	75,000
	Book value on the date of sale	1,68,750

As book value is greater than selling price the difference is loss.

= Rs. 1,68,750 — 75,000

∴ Loss = Rs. 93,750

In the Books of Vimal & Brothers

Journal Entries

Date	Particulars	L.F.	Debit Rs.	Credit Rs.
2002 July 31	Machinery A/c Dr To Bank A/c (Machinery purchased)		3,75,000	3,75,000
2002 Mar 31	Depreciation A/c Dr To Machinery A/c (Depreciation provided)		56,250	56,250
,,	Profit & Loss A/c Dr To Depreciation A/c (Depreciation transferred to Profit & Loss account)		56,250	56,250
2004 Mar 31	Depreciation A/c Dr To Machinery A/c (Depreciation provided)		75,000	75,000
,,	Profit & Loss A/c Dr To Depreciation A/c (Depreciation transferred to Profit & Loss account)		75,000	75,000

Date	Particulars			Dr (Rs.)	Cr (Rs.)
2005 Mar 31	Depreciation A/c To Machinery A/c (Depreciation provided)	Dr		75,000	75,000
,,	Profit & Loss A/c To Depreciation (Depreciation transferred to Profit & Loss account)	Dr		75,000	75,000
,,	Bank A/c To Machinery A/c (Machinery sold)	Dr		75,000	75,000
Mar 31	Profit & Loss A/c To Machinery A/c (Loss on sale of plant)	Dr		93,750	93,750

Ledger Accounts

Plant Account

Dr | Cr

Date	Particulars	Rs.	Date	Particulars	Rs.
2002 July 1	To Bank A/c	3,75,000	2003 Mar 31	By Depreciation A/c	56,250
			,,	By Balance c/d	3,18,750
		3,75,000			3,75,000
2003 Apr 1	To Balance b/d	3,18,750	2004 Mar 31	By Depreciation A/c	75,000
			,,	By Balance c/d	2,43,750
		3,18,750			3,18,750
2004 Apr 1	To Balance b/d	2,43,750	2005 Mar 31	By Depreciation A/c	75,000
			,,	By Bank A/c	75,000
			,,	By Profit & Loss A/c (Loss on sale)	93,750
		2,43,750			2,43,750

Depreciation Account

Dr | Cr

Date	Particulars	Rs.	Date	Particulars	Rs.
2003 Mar 31	To Machinery A/c	56,250	2003 Mar 31	By Profit & Loss A/c	56,250
		56,250			56,250
2004 Mar 31	To Machinery A/c	75,000	2004 Mar 31	By Profit & Loss A/c	75,000
		75,000			75,000
2005 Mar 31	To Machinery A/c	75,000	2005 Mar 31	By Profit & Loss A/c	75,000
		75,000			75,000

Illustration : 9

On April 1, 2001 Machinery was purchased for Rs.4,00,000. On 1st October 2002, a new machine costing Rs.2,40,000 was purchased. On 30th September 2003, the machinery purchased on 1st April 2001 having became obsolete was sold for Rs.2,40,000. The accounting year ends on 31st March and depreciation is to be provided at 10% p.a. on straight line method.

Pass journal entries and prepare important ledger accounts for three years.

Solution:

Calculation of Profit or Loss on Sale of Machinery

		Rs.
	Cost of Machinery (April, 2001)	4,00,000
Less:	Depreciation for 2001-02	40,000
		3,60,000

Less:	Depreciation for 2002-03	40,000
		3,20,000
Less:	Depreciation till the date of sale (30.9.2003)	20,000
	Book value on the date of sale	3,00,000

As book value is greater than selling price the difference is loss.

= Rs.3,00,000 - 2,40,000

∴ Loss = Rs.60,000.

Journal Entries

Date	Particulars		L.F.	Debit Rs.	Credit Rs.
2001 Apr 1	Machinery A/c To Bank A/c (Machinery purchased)	Dr		4,00,000	4,00,000
2002 Mar 31	Depreciation A/c To Machinery A/c (Depreciation provided)	Dr		40,000	40,000
,,	Profit & Loss A/c To Depreciation A/c (Depreciation transferred to Profit & Loss A/c)	Dr		40,000	40,000
2002 Oct 1	Machinery A/c To Bank A/c (New machine purchased)	Dr		2,40,000	2,40,000
2003 Mar 31	Depreciation A/c To Machinery A/c (Depreciation provided 40,000 + 12,000)	Dr		52,000	52,000
,,	Profit & Loss A/c To Depreciation A/c (Depreciation transferred to Profit & Loss A/c)	Dr		52,000	52,000
2003 Sep 30	Depreciation A/c To Machinery A/c (Depreciation provided on first machine till the date of sale)	Dr		20,000	20,000
,,	Bank A/c To Machinery A/c (First machinery sold)	Dr		2,40,000	2,40,000
Sep 30	Profit & Loss A/c To Machinery A/c (Loss on Sale of Machinery)	Dr		60,000	60,000
2004 Mar 31	Depreciation A/c To Machinery A/c (Depreciation provided on Second Machine)	Dr		24,000	24,000
,,	Profit & Loss A/c To Depreciation A/c (Depreciation transferred to profit & loss A/c) 20,000+24,000	Dr		44,000	44,000

Ledger Accounts

Machinery Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2001 Apr 1	To Bank A/c	4,00,000	2002 Mar 31	By Depreciation A/c	40,000
			,,	By Balance c/d	3,60,000
		4,00,000			4,00,000
2002 Apr 1	To Balance b/d	3,60,000	2003 Mar 31	By Depreciation A/c (40,000 + 12,000)	52,000
Oct 1	To Bank A/c	2,40,000			

Date	Particulars	Rs.	Date	Particulars	Rs.
			,,	By Balance c/d	5,48,000
		6,00,000			6,00,000
2003 Apr 1	To Balance b/d	5,48,000	2003 Sep 30	By Depreciation A/c	20,000
			,,	By Bank A/c	2,40,000
			,,	By Profit & Loss A/c (Loss on sale)	60,000
			2004 Mar 31	By Depreciation A/c	24,000
			,,	By Balance c/d	2,04,000
		5,48,000			5,48,000
2004 Apr 1	To Balance b/d	2,04,000			

Depreciation Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2002 Mar 31	To Machinery A/c	40,000	2002 Mar 31	By Profit & Loss A/c	40,000
		40,000			40,000
2003 Mar 31	To Machinery A/c	52,000	2003 Mar 31	By Profit & Loss A/c	52,000
		52,000			52,000
2003 Sep 30	To Machinery A/c	20,000	2004 Mar 31	By Profit & Loss A/c	44,000
2004 Mar 31	To Machinery A/c	24,000			
		44,000			44,000

Illustration : 10

Aravinth & Brothers purchased a Machinery for Rs.90,000 on 1st April 2001. They spent Rs.10,000 for installation charges. But the machinery was brought into use from 1st October 2001. It further purchased a machinery costing Rs.20,000 on 1st January 2004. Accounts are closed 31st March every year. Depreciation is to be provided at the rate of 10% per annum on Written Down Value Method.

Prepare Machinery account & Depreciation account for three years.

In the Books of Aravinth & Brothers

Ledger Accounts

Machinery Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2001 Apr 1	To Bank A/c	1,00,000	2002 Mar 31	By Depreciation A/c (10% on Rs.1,00,000 for 6 months)	5,000
			,,	By Balance c/d	95,000
		1,00,000			1,00,000
2002 Apr 1	To Balance b/d	95,000	2003 Mar 31	By Depreciation A/c	9,500
			,,	By Balance c/d	85,500
		95,000			95,000
2003 Apr 1	To Balance b/d	85,500	2004 Mar 31	By Depreciation A/c (8550+500 i.e., 10% on Rs.20,000 for 3 months)	9,050
2004 Jan 1	To Bank A/c	20,000	,,	By Balance C/d	96,450
		1,05,500			1,05,500
2004 Apr 1	To Balance b/d	96,450			

Depreciation Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2002			2002		
Mar 31	To Machinery A/c	5,000	Mar 31	By Profit & Loss A/c	5,000
		5,000			5,000
2003			2003		
Mar 31	To Machinery A/c	9,500	Mar 31	By Profit & Loss A/c	9,500
		9,500			9,500
2004			2004		
Mar 31	To Machinery A/c	9,050	Mar 31	By Profit & Loss A/c	9,050
		9,050			9,050

Illustration : 11

Machinery was purchased on 1.4.2000 for Rs.1,60,000. On 1.10.2000 another machinery was purchased for Rs.80,000. On 30.9.2001 the second machine was sold for Rs.80,000. Assuming that the books are closed on March 31 each year and the depreciation is 10% under diminishing balance method.

Prepare Machinery account for three years.

Solution:

Calculation of Profit or Loss on Sale of Machinery

		Rs.
	Cost of Machinery (1.10.2000)	80,000
Less:	Depreciation for 2000 - 01	4,000
		76,000
Less:	Depreciation till the date of sale (30.9.2001)	3,800
	Book Value on the date of sale	72,200

As book value is less than selling price the difference is profit.

= 80,000 — 72,200

∴ Profit = Rs.7,800.

Ledger Accounts

Machinery Account

Dr. Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
2000			2001		
Apr 1	To Bank A/c	1,60,000	Mar 31	By Depreciation A/c (16,000 + 4,000)	20,000
Oct 1	To Bank A/c	80,000	”	By Balance c/d	2,20,000
		2,40,000			2,40,000
2001			2001		
Apr 1	To Balance b/d	2,20,000	Sep 30	By Depreciation A/c (80,000 — 4,000 = 76,000 on Rs.76,000 @ 10% for 6 months)	3,800
Sep 30	To Profit & Loss A/c	7,800	Sep 30	By Bank A/c	80,000
			2002		
			Mar 31	By Depreciation A/c (1,60,000 — 16,000 = 1,44,000 on Rs.1,44,000 @ 10% for 1 year)	14,400
			Mar 31	By Balance c/d	1,29,600
		2,27,800			2,27,800
2002					
Apr 1	To Balance b/d	1,29,600			

QUESTIONS

I. Objective Type:

a) Fill in the blanks:

1. All assets whose benefit is derived for a __________ period of time are called as Fixed Assets.
2. The estimated sale value of the asset at the end of it's economic life is called as ________ value.
3. ________ method of depreciation is calculated on the original cost of asets.
4. Under ________ method, depreciation is calculated on the book value of the asset each year.
5. _______ method of depreciation is used in the case of Lease.
6. Under insurance policy method, cash is paid by way of _______ every year.
7. ________ method of depreciation is suitable for special type of asset like Loose tools.

(Answeres: 1. Long; 2. Residual / Scrap; 3. Straight line; 4. Written down value; 5. Annuity; 6. Premium; 7. Revaluation)

b) Choose the correct answer :

1. Depreciation arises due to
   a) wear and tear of the asset
   b) fall in the market value of asset
   c) fall in the value of money
2. Under straight line method, rate of depreciation is calculated on
   a) Original cost b) Written down value
   c) Cost less scrap value

3. Under diminishing balance method, depreciation
   a) decreases every year b) increases every year
   c) constant every year
4. The term depletion is used for
   a) Intangible assets b) Fixed assets
   c) Natural resources
5. If selling price is more than the book value of the asset on the date of sale, it is
   a) a loss b) an income c) a profit
6. If selling price is less than the book value of the asset it denotes
   a) loss b) capital profit c) expenditure
7. Profit made on sale of fixed asset is debited to
   a) Profit and Loss account b) Fixed Asset account
   c) Deprecnation account
8. Loss on sale of fixed asset appear on the
   a) credit side of Depreciation account
   b) debit side of fixed asset account
   c) credit side of fixed asset acount
9. The amount of depreciation charged on a machinery will be debited to
   a) Machinery account b) Depreciation account
   c) Cash account
10. Total amount of depreciation provided on the written down value method at the rate of 10% p.a. on Rs.10,000 for first three years will be
    a) Rs. 2,107 b) Rs. 2,710 c) Rs. 2,701

(Answers : 1. (a); 2. (a); 3. (a); 4. (c); 5. (c); 6. (a); 7. (b); 8. (c); 9. (b); 10. (b))

II. Other Questions:

1. Define Depreciation.
2. What is Fixed Asset?
3. What is residual value?
4. What is obsolesence?
5. Write notes on 'Effluxion of time'.
6. What is straight line method of depreciation?
7. Write notes on written down value method of depreciation.
8. What is Depreciation Fund Method of depreciation?
9. What is Annuity method of depreciation?
10. What is insurance policy method of depreciation?
11. Write notes on revaluation method of depreciation.
12. Write the formula to calculate rate of depreciation under straight line method.
13. What are different methods of providing depreciation?
14. What are the reasons for providing depreciation?
15. What are the causes of depreciation?
16. What are merits and demerits of straight line method of depreciation?
17. What are merits and demerits of written down value method?
18. What are the factors determining the amount of depreciation?

III. Problems :

1. A company purchased Furniture for Rs.28,000. Depreciation is to be provided annually according to the Straight Line Method. The useful life of the furniture is 5 years and the residual value is Rs.2,000.

   You are required to findout the amount of depreciation.

   (Answer : Rs.5,200)

2. From the following particulars, findout the rate of depreciation, under Straight Line Method.

Cost of Fixed Asset	Rs. 50,000
Residual Value	Rs. 5,000
Estimated Life	10 years

(Answer : Rate of Dep. 9%)

3. A Plant has the original value of Rs.5,00,000. The scrap value in 10 years time is expected to be Rs.20,000. Determine the rate of depreciation when the management wants to depreciate it by Straight Line Method.

   (Answer : Rate of Dep. : 9.6%)

4. A machine costing Rs.3,00,000 is estimated to have a life of 10 years and estimated scrap value is Rs.20,000 at the end of its life. Calculate the rate of depreciation under the Straight Line Method.

   (Answer : Rate of dep : 9.3%)

5. A machine was purchased for Rs.2,40,000 on 1.1.2000. This is expected to last for five years. Estimated scrap at the end of five years is Rs.40,000. Find out the rate of depreciation under the Straight Line Method.

   (Answer : Rate of Dep : 16.7%)

6. Find out the rate of depreciation under straight line method:

Cost of the plant	Rs. 2,30,000
Installation charges	Rs. 20,000
Expected life in years	10 years
Scrap value	Rs. 50,000

(Answer: Rate of Dep: 8%)

7. From the following particulars find out the rate of depreciation under the Straight Line Method.

   Cost of assets: Rs.10,000

Scrap value Rs. 1,000.
Estimated life 10 years.

(June 2003)
(Answer : 9%)

8. A company purchased a Machinery for Rs.12,000. It's useful life is 10 years and the scrap value is Rs.1,200. Determine the rate of depreciation under the Straight Line Method.

(March 2003)
(Answer : 9%)

9. Sudha & Co., purchased a Machinery for Rs.64,000 on 1st April 1996. They spent Rs.28,000 on the repairs and installed the same. Depreciation is writtenoff at 10% p.a. on the Straight Line Method. On 30th June, 1998 the machinery was found to be unsuitable and sold for Rs.52,000. Assume that the accounts are closed on 31st December every year.

   Pass the journal entries and prepare Machinery account and Depreciation account for three years.

(October 2002)
(Answer: Loss on sale of machinery Rs. 19,300)

10. Sunil & Co. purchased a fixed asset on 1.4.2002 for Rs.5,00,000. Depreciation is to be provided at the rate of 15% annually according to the Straight Line Method. The books are closed on 31st March every year.

    Pass the necessary journal entries, prepare Fixed asset account and Depreciation account for the first three years.

(Answer: Balance at the end of third year Rs. 2,75,000)

11. M/s. Shankar & Co. purchased a Machinery on 1.1.2002 for Rs.10,00,000. The firm writes off depreciation at 10% on the original cost every year. The books are closed on 31st March every year.

Pass the necessary journal entries, prepare Machinery account and Depreciation account for the first three years.

(Answer: Balance at the end of the third year : Rs. 7,75,000)

12. Ganesh & Co. purchased a Machinery worth Rs.3,00,000 on 1st October 2000. They spent Rs.20,000 on it's erection. The firm writes off depreciation at the rate of 10% on the original cost every year. The books are closed on 31st March of every year.

    Prepare Machinery account and Depreciation account for three years.

(Answer: Balance at the end of the third year: Rs. 2,40,000)

13. On 1st April, 2001, Excel Company Limited purchased a machine for Rs.56,000. On the date of purchase it was estimated that the effective life of the machine will be 10 years and after 10 years it's scrap value will be Rs.6,000.

    Prepare Machine Account and Depreciation Account for three years, Depreciation is charged on Straight Line Method. Accounts are closed on 31st March of every year.

(Answer: Depreciation amount: Rs.5,000.
Balance at the end of third year: Rs.41,000).

14. Senthil purchased Machinery for Rs.4,00,000 on 1st April 2000. On 1st April 2001, an additional machinery was purchased for Rs.40,000. Prepare the Asset account for three years. Depreciation is to be provided at 10% p.a. using Straight Line Method. The firm closes its book on 31st March of every year.

(Answer: Balance at the end of third year Rs.3,12,000)

15. A garment company purchased a Plant on 1st April 2001 for Rs.1,00,000. After having used it for three years it was sold for Rs.80,000. Depreciation is to be provided at the rate of 10% per annum on Fixed Instalment Method. Accounts are closed on 31st March every year.

Find out the Profit or Loss on sale of Plant.

(Answer: Profit on sale of plant Rs.10,000)

16. Gayathri Garments purchased a Plant on 1.4.2000 for Rs.2,40,000. After three years the plant was sold for Rs.1,50,000. The firm charges depreciation at the rate of 10% per annum on straight line method. Accounts are closed on 31st March every year.

    Pass Journal entries, prepare Plant account and Depreciation account.

    (Answer: Loss on sale of Plant Rs.18,000)

17. Kumaran Brothers purchased a Machinery on 1.1.2000 for Rs.5,00,000. On 1.1.2002 the machinery was sold for Rs.4,00,000. The firm charges depreciation at the rate of 15% per annum on Straight Line Method. The books are closed on 31st March every year.

    Prepare Machinery account and Depreciation account.

    (Answer: Profit on sale of machinery Rs.50,000)

18. Michel & Co. purchased a second hand plant for Rs.4,70,000 on 1st July 2001. They spent Rs.30,000 on the repairs and installed the plant. Depreciation is written off at 10% p.a. on the Straight Line Method. On 30th September 2003, the plant was found to be unsuitable and sold for Rs.3,50,000.

    Prepare Plant account and Depreciation account for three years assuming that the accounts are closed on 31st March every year.

    (Answer: Loss on sale of plant Rs.37,500)

19. A company purchased a Machinery on 1.4.2001 for Rs.2,40,000. On 1st October 2002, it purchased another machinery for Rs.60,000. On 1st October 2003, it sold off the first machine purchased on 1.4.2001 for Rs.1,68,000. On the same date, it purchased another machinery for Rs.1,50,000.

Accounts are closed every year on 31st March. Depreciation is written off at 10% p.a. on original cost.

Prepare Machinery account and Depreciation account for three years.

(Answer: Loss on sale of machinery Rs.12,000.
Balance at the end of third year: Rs.1,93,500)

20. Akbar & Co. purchased a plant for Rs.80,000 on 1.4.2001. It is depreciated at 10% p.a. on reducing balance method for three years. Accounts are closed on 31st March every year.

    Pass the Journal entries, prepare Plant account and Depreciation account for three years.

    (Answer: Balance at the end of third year Rs.58,320)

21. Bhaskar & Brothers purchased a Machinery on 1.12.2002 for Rs.5,70,000. The firm writes off depreciation at 10% on reducing balance method. The books are closed on 31st March every year.

    Pass the necessary journal entries, prepare Machinery account and Depreciation account for the first three years.

    (Answer: Balance at the end of third year Rs,4,46,310)

22. On 1st October 2000, a company purchased a plant for Rs.6,00,000. They spent Rs.40,000 on its erection. The firm writes off depreciation at the rate of 20% on Reducing Balance Method. The books are closed on 31st March every year.

    Prepare Plant account and Depreciation account for three years.

    (Answer: Balance at the end of third year Rs.3,68,640)

23. Archana started business on 1st April 2001 and she purchased a Machinery for Rs.1,40,000. She purchased another machinery on 1st November 2002 costing Rs.30,000. She adopted a policy of charging 15% p.a. depreciation under Diminishing Balance Method.

The accounts are closed every year on 31st March. Prepare Machinery account and Depreciation account for the first three years.

(Answer: Balance at the end of third year Rs.1,09,884)

24. Abdul purchased a Machinery on 1st April 2001 for Rs.2,00,000. After having used it for three years it was sold for Rs.1,60,000. Depreciation is to be provided at the rate of 10% p.a. on Diminishing Balance Method. Accounts are closed on 31st March of every year.

    Find out the Profit or Loss on sale of machinery.

    (Answer: Profit on sale of machinery Rs.14,200)

25. Sivam Printing Press purchased a printing machinery costing Rs.3,00,000 on 1.4.2001. After three years the machinery was sold for Rs.2,80,000. The firm charges depreciation @ 10% per annum on Diminishing Balance Method. Accounts are closed on 31st March every year.

    Pass journals, prepare Machinery account and Depreciation account.

    (Answer: Profit on sale of machinery Rs.61,300)

26. A firm bought a machinery on 1.1.2002 for Rs.5,00,000. On 31.12.2003 the machinery was sold for Rs.3,90,000. The firm charges depreciation at the rate of 10% per annum on Diminishing Balance Method. The books are closed on 31st March every year.

    Pass journal entries, prepare Machinery account and Depreciation account.

    (Answer: Loss on sale of machinery Rs.15,844)

27. Chennai Printing House purchased a Machinery for Rs.4,60,000 on 1st July 2001. It spent Rs.40,000 on the repairs and installed the machinery. Depreciation is written off at 10% p.a. on Diminishing Balance Method. On 31st October 2003, the machinery was found to be unsuitable and sold for Rs.4,10,000.

Prepare Machinery account and Depreciation account for three years assuming that the accounts are closed on 31st March every year.

(Answer: Profit on sale of machinery Rs.18,031)

28. A Limited company purchased a Machinery on 1.6.2001 for Rs.2,10,000. On 1st October 2003, it purchased another machinery for Rs.1,00,000. On 1st October 2003, it sold off the first machinery purchased on 1.6.2001 for Rs.1,80,000. Accounts are closed every year on 31st March. Depreciation is written off at 10% per annum on Diminishing Balance Method.

    Prepare Machinery account and Depreciation account for the first three years.

    (Answer: Profit on sale of machine Rs.15,413
    Balance at the end of third year Rs.95,000)

29. A plant is purchased for Rs.90,000. It is depreciated as 10% p.a. on reducing balance for three years. When it becomes obsolete due to new method of production and is scrapped. The scrap produces Rs.66,000 at the end of the third year.

    Prepare plant and depreciation account for three years.

    (Answer: Profit on sale of plant Rs.390)

30. On 1st January 2003, Ramesh & Co., purchased plant worth Rs.1,00,000 was sold away on 31st December 2004 for Rs.50,000. Depreciation was provided at 20% p.a. on the written down value every year. Accounts are prepared on 31st March every year.

    Show the plant account and depreciation account for three years.

    (Answer: Loss on sale of plant Rs. 14,600)

31. Alexander Company Limited purchased a plant for Rs.1,80,000 on 1st January 2003. They spent Rs. 20,000 for installation

expenses. Depreciation is to be provided @ 10% p.a. on the deminishing value method.

Prepare plant account and depreciation account for three years ending 31st March every year.

(Answer: Balance at the end of third year Rs.1,57,950)

Chapter – 4

FINANCIAL STATEMENT ANALYSIS - RATIO ANALYSIS

Learning Objectives

After studying this Chapter, you will be able to:

- ➢ *understand the meaning, significance and limitations of financial statement analysis.*
- ➢ *calculate liquidity, solvency, profitability and activity ratios.*

Financial statements are final result of accounting work done during the accounting period. Financial statements normally include Trading, Profit and Loss Account and Balance Sheet. The users of accounting information may not be able to get direct reply to certain questions from the above statements. However, by expressing the items in the financial statements, in relation to each other we can get meaningful information.

Analysis of financial statement has been defined as "a process of evaluating the relationship between the component parts of the financial statements to obtain a better understanding of a firm's position and performance".

Financial statement analysis is an important part of the overall financial assessment. The different users look at the business concern from their respective view point and are interested in knowing about its profitability and financial condition. A detailed cause and effect study of the profitability and financial condition is the overall objective of financial statement analysis.

4.1 Significance of Financial Statement Analysis:

1. Judging the earning capacity or profitability of a business concern.
2. Analysing the short term and long term solvency of the business concern.
3. Helps in making comparative studies between various firms.
4. Assists in preparing budgets.

4.1.1 Limitations of Financial Statement Analysis:

Analysis of financial statements helps to ascertain the strength and weakness of the business concern, but at the same time it suffers from the following limitations.

1. It analyses what has happened till date and does not reflect the future.
2. It ignores price level changes.
3. Financial analysis takes into consideration only monetary matters, qualitative aspects are ignored.
4. The conclusions of the analysis is based on the correctness of the financial statements.
5. Analysis is a means to an end and not the end itself.
6. As there is variation in accounting practices followed by different firms a valid comparison of their financial analysis is not possible.

There are different ways by which financial statement analysis can be undertaken and one among them is **"Ratio Analysis"**. In this chapter we are discussing the Ratio Analysis.

4.2 Ratio Analysis:

Ratio is an expression of one number in relation to another. **Ratio analysis** is the process of determining and interpreting the numerical relationship between figures of financial statements. A ratio is a mathematical relationship between two items expressed in a quantitative form. An absolute figure does not convey much meaning. Generally, with the help of other related information the significance of the absolute figure could be understood better.

For example Nila earns Rs.50,000 profit in her business while Nivedita earns Rs.40,000 profit. Whose business is more profitable? Instantly we may say that as Nila earns more profit, her business is more profitable. But in order to answer this question we must know what was the sales made by both of them. Suppose Nila has made a sale of Rs.4,00,000 and Nivedita Rs.3,00,000. Now we can calculate the percentage of profit earned on the sales (Profit / Sales x 100) to know whose business is more profitable.

$$\text{Nila} = \frac{50{,}000}{4{,}00{,}000} \times 100 = 12.5\ \%$$

$$\text{Nivedita} = \frac{40{,}000}{3{,}00{,}000} \times 100 = 13.33\%$$

From the above calculations it is clear that the profitability of Nivedita is more than Nila, because, she is getting 13.33% return and Nila is getting only 12.5%.

Thus, the above example explains that absolute figures by themselves may not communicate meaningful information. Hence, business results are understood properly only when the relevant figures are considered together.

4.2.1 Definition:

In the words of **Kennedy** and **Mc Millan** “the relationship of an item to another expressed in simple mathematical form is known as a ratio”

Expression of Ratios:

Ratios are expressed in three ways:

1. **Time:** In this type of expression one number is divided by another number and the quotient is taken as number of times. For example, expressing the attendance of 40 students present in a class of 80 students would be:

$$\frac{40}{80} = 0.5 \text{ times}$$

2. **Percentage:** It is expressed in Percentage. When the above example is expressed as percentage, it would be as under

$$\frac{40}{80} \times 100 = 50\%$$

3. **Pure:** It is expressed as a proportion. In the above example, this would be as under

$$\frac{40}{80} = \frac{1}{2} = 0.5$$

This may also be expressed as 0.5:1.

The study of relationships between various items or groups of items in financial statements is known as ‘Financial Ratio Analysis’.

4.2.2 Objectives:

The objectives of using ratios are to test the profitability, financial position (liquidity and solvency) and the operating efficiency of a concern.

4.2.3 Advantages of Ratio Analysis:

Ratio analysis is an important technique in financial analysis. It is a means for judging the financial soundness of the concern. The advantages of accounting ratios are as follows:

1. It is an useful device for analysing the financial statements.
2. It simplifies, summarizes the accounting figures to make it understandable.
3. It helps in financial forecasting.
4. It facilitates interfirm and intrafirm comparisons.

Ratio analysis is useful in finding the strength and weakness of a business concern. After identifying the weakness, the ratios are also helpful in determining the causes of the weakness.

4.2.4 Classification of Ratios:

The classification of ratios on the basis of purpose is as follows:

Ratios

- **Liquidity**
  1. Current Ratio
  2. Liquid Ratio
  3. Absolute Liquid Ratio
- **Solvency**
  1. Debt-Equity Ratio
  2. Proprietory Ratio
- **Profitability**
  1. Gross Profit Ratio
  2. Net Profit Ratio
  3. Operating Profit Ratio
  4. Operating Ratio
- **Activity (Turnover)**
  1. Capital Turnover Ratio
  2. Fixed Asset Turnover Ratio
  3. Stock Turnover Ratio
  4. Debtors Turnover Ratio
  5. Creditors Turnover Ratio

I. Liquidity Ratios

Liquidity Ratios measure the firms' ability to pay off current dues i.e., repayable within a year. Liquidity ratios are otherwise called as **Short Term Solvency Ratios**. The important liquidity ratios are

1. Current Ratio
2. Liquid Ratio
3. Absolute Liquid Ratio

1. Current Ratio :

This ratio is used to assess the firm's ability to meet its current liabilities. The relationship of current assets to current liabilities is known as **current ratio**. The ratio is calculated as:

$$\boxed{\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}}$$

Current Assets are those assets, which are easily convertible into cash within one year. This includes cash in hand, cash at bank, sundry debtors, bills receivable, short term investment or marketable securities, stock and prepaid expenses.

Current Liabilities are those liabilities which are payable within one year. This includes bank overdraft, sundry creditors, bills payable and outstanding expenses.

Illustration : 1

From the following compute current ratio:

	Rs.		Rs.
Stock	36,500	Prepaid expenses	1,000
Sundry Debtors	63,500	Bank overdraft	20,000
Cash in hand & bank	10,000	Sundry creditors	25,000
Bills receivable	9,000	Bills payable	16,000
Short term investments	30,000	Outstanding expenses	14,000

Solution:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets = Stock + Sundry debtors + Cash in hand and bank + Bills receivable + Short term investments + Prepaid expenses

= 36,500 + 63,500 + 10,000 + 9,000 + 30,000 + 1,000

= Rs. 1,50,000

Current Liabilities = Bank overdraft + Sundry creditors + Bills payable + Outstanding expenses

= 20,000 + 25,000 + 16,000 + 14,000

= Rs. 75,000.

$$\text{Current Ratio} = \frac{1,50,000}{75,000}$$

= 2 : 1

2. Liquid Ratio

This ratio is used to assess the firm's short term liquidity. The relationship of liquid assets to current liabilities is known as **liquid ratio**. It is otherwise called as **Quick ratio** or **Acid Test ratio**. The ratio is calculated as:

$$\boxed{\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}}$$

Liquid assets means current assets less stock and prepaid expenses.

Illustration : 2

Taking the figures from the above illustration liquid ratio is calculated as follows:

Solution:

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current liabilities}}$$

Liquid Assets = Current Assets – (Stock + Prepaid expenses)

= 1,50,000 – (36,500 + 1,000)

= 1,50,000 – 37,500

= Rs. 1,12,500

$$\text{Liquid Ratio} = \frac{1,12,500}{75,000}$$

= 1.5 : 1

3. Absolute Liquid Ratio

It is a modified form of liquid ratio. The relationship of absolute liquid assets to liquid liabilities is known as **absolute liquid ratio**. This ratio is also called as '**Super Quick Ratio**'. The ratio is calculated as:

$$\boxed{\text{Absolute Liquid Ratio} = \frac{\text{Absolute Liquid Assets}}{\text{Liquid Liabilities}}}$$

Absolute liquid assets means cash, bank and short term investments. **Liquid liabilities** means current liabilities less bank overdraft.

Illustration : 3

Taking the figures from Illustration : 1

Solution:

$$\text{Absolute Liquid Ratio} = \frac{\text{Absolute Liquid Assets}}{\text{Liquid liabilities}}$$

Absolute Liquid Assets = Cash + Bank + Short term investments

= 10,000 + 30,000

= Rs. 40,000

Liquid Liabilities = Current liabilities — Bank overdraft

= 75,000 – 20,000

= Rs. 55,000

$$\text{Absolute Liquid Ratio} = \frac{40,000}{55,000} = 0.73 : 1$$

(**Note :** All liquidity ratios are expressed as a proportion)

II. Solvency Ratios

Solvency refers to the firms ability to meet its long term indebtedness. Solvency ratio studies the firms ability to meet its long term obligations. The following are the important solvency ratios:

1. Debt-Equity Ratio
2. Proprietory Ratio

1. Debt Equity Ratio

This ratio helps to ascertain the soundness of the long term financial position of the concern. It indicates the proportion between total long term debt and shareholders funds. This also indicates the extent to which the firm depends upon outsiders for its existence. The ratio is calculated as:

$$\text{Debt-Equity Ratio} = \frac{\text{Total long term Debt}}{\text{Shareholders funds}}$$

Total long term debt includes Debentures, long term loans from banks and financial institutions. **Shareholders funds** includes Equity share capital, Preference share capital, Reserves and surplus.

Illustration : 4

Calculate Debt Equity Ratio from the following information.

	Rs.
Debentures	2,00,000
Loan from Banks	1,00,000
Equity share capital	1,25,000
Reserves	25,000

Solution:

$$\text{Debt - Equity Ratio} = \frac{\text{Total Long Term Debt}}{\text{Shareholders funds}}$$

Total long term debt = Debentures + Loans from Bank

= 2,00,000 + 1,00,000

= Rs. 3,00,000

Shareholders funds = Equity Share Capital + Reserves

= 1,25,000 + 25,000

= Rs. 1,50,000

$$\text{Debt-Equity Ratio} = \frac{3,00,000}{1,50,000} = 2:1$$

2. Proprietory Ratio

This ratio shows the relationship between proprietors or shareholders funds and total tangible assets. The ratio is calculated as:

$$\text{Proprietory Ratio} = \frac{\text{Share holders funds (Proprietors funds)}}{\text{Total tangible assets}}$$

Tangible assets will include all assets except goodwill, preliminary expenses etc.

Illustration : 5

From the following calculate Proprietory Ratio

	Rs.		Rs.
Equity share capital	1,00,000	Furniture	10,000
Preference share capital	75,000	Bank	20,000
Reserves & surplus	25,000	Cash	25,000
Machinery	30,000	Stock	15,000
Goodwill	5,000		

Solution :

$$\text{Proprietory Ratio} = \frac{\text{Shareholders funds}}{\text{Total tangible assets}}$$

Shareholders fund = Equity capital + Preference Share Capital + Reserve & Surplus

= 1,00,000 + 75,000 + 25,000

= Rs. 2,00,000

Total tangible assets = Machinery + Furniture + Bank + Cash + Stock

= 30,000 + 10,000 + 20,000 + 25,000 + 15,000

= Rs. 1,00,000

$$= \frac{2,00,000}{1,00,000} = 2:1$$

(**Note :** All solvency ratios are expressed as a proportion.)

III. Profitability Ratios

Efficiency of a business is measured by profitability. Profitability ratio measures the profit earning capacity of the business concern. The important profitability ratios are discussed below:

1. Gross Profit Ratio
2. Net Profit Ratio
3. Operating Profit Ratio
4. Operating Ratio

1. Gross Profit Ratio

This ratio indicates the efficiency of trading activities. The relationship of Gross profit to Sales is known as **gross profit ratio**. The ratio is calculated as:

$$\boxed{\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100}$$

Gross profit is taken from the Trading Account of a business concern. Otherwise Gross profit can be calculated by deducting cost of goods sold from sales. Sales means Net sales.

Gross Profit = Sales — Cost of goods sold

Cost of goods sold = Opening Stock + Purchases — Closing Stock

(or)

Sales — Gross Profit

Illustration : 6

From the following particulars ascertain gross profit ratio

	Rs.		Rs.
Cash sales	40,000	Sales return	5,000
Credit sales	65,000	Gross profit	40,000

Solution:

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

Sales = Total Sales — Sales Returns

= 40,000 + 65,000 — 5,000

= Rs. 1,00,000

$$= \frac{40,000}{1,00,000} \times 100 = 40\%$$

2. Net Profit Ratio:

This ratio determines the overall efficiency of the business. The relationship of Net profit to Sales is known as **net profit ratio**. The ratio is calculated as:

$$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Sales}} \times 100$$

Net profit is taken from the Profit and Loss account of the business concern or the gross profit of the concern less administration expenses, selling and distribution expenses and financial expenses.

Illustration : 7

Calculate net profit ratio from the following:

	Rs.
Net Profit	60,000
Sales	3,00,000

Solution:

$$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Sales}} \times 100$$

$$= \frac{60{,}000}{3{,}00{,}000} \times 100$$

$$= 20\%$$

3. Operating Profit Ratio

This ratio is an indicator of the operational efficiency of the management. It establishes the relationship between Operating profit and Sales. The ratio is calculated as:

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Sales}} \times 100$$

Where operating profit is Net profit + Non-operating expenses – – Non-operating income.

Where, Non-operating expenses are interest on loan and loss on sale of assets.

Non-operating income are dividend, interest received and profit on sale of asset. (or) Operating profit = Gross profit — Operating expenses.

Operating expenses include administration, selling and distribution expenses. Financial expenses like interest on loan are excluded for this purpose.

Illustration : 8

Calculate the operating profit ratio from the following:

	Rs.
Net Profit	3,00,000
Loss on Sale of Furniture	10,000
Profit on sale of investments	30,000
Interest paid on loan	30,000
Interest from investments	20,000
Sales	5,80,000

Solution:

$$\text{Operating Profit Ratio} = \frac{\text{Operating Profit}}{\text{Sales}} \times 100$$

Operating profit = Net profit + Non-operating expenses — Non-operating income.

Non-operating expenses = Interest on loan + Loss on sale of furniture.

= 30,000 + 10,000

= Rs. 40,000

Non-operating income = Interest received from investments + Profit on sale of investment

= 20,000 + 30,000

= Rs.50,000

Operating profit = 3,00,000 + 40,000 — 50,000

= Rs. 2,90,000

$$\text{Operating Profit Ratio} = \frac{2,90,000}{5,80,000} \times 100$$

= 50%

4. Operating Ratio

This ratio determines the operating efficiency of the business concern. Operating ratio measures the amount of expenditure inurred in production, sales and distribution of output. The relationship between

Operating cost to Sales is known as **Operating Ratio**. The ratio is calculated as:

$$\boxed{\text{Operating Ratio} = \frac{\text{Cost of goods sold + Operating expenses}}{\text{Sales}} \times 100}$$

Illustration : 9

From the following details, calculate the operating ratio.

	Rs.
Cost of goods sold	6,00,000
Operating expenses	40,000
Sales	8,20,000
Sales returns	20,000

Solution:

$$\text{Operating Ratio} = \frac{\text{Cost of goods sold + Operating expenses}}{\text{Sales}} \times 100$$

$$= \frac{6,00,000 + 40,000}{8,20,000 - 20,000} \times 100$$

$$\text{Operating Ratio} = \frac{6,40,000}{8,00,000} \times 100 = 80\%$$

(**Note**: All profitability ratios will be expressed in terms of percentage.)

IV. Activity Ratios

Activity ratios indicate the performance of the business. The performance of a business is judged with its sales (turnover) or cost of goods sold. These ratios are thus referred to as **turnover ratios**. A few important activity ratios are discussed below:

1. Capital turnover ratio
2. Fixed assets turnover ratio
3. Stock turnover ratio
4. Debtors turnover ratio
5. Creditors turnover ratio

1. Capital Turnover Ratio

This shows the number of times the capital has been rotated in the process of carrying on business. Efficient utilisation of capital would lead to higher profitability. The relationship between Sales and Capital employed is known as **Capital Turnover Ratio**. The ratio is calculated as:

$$\boxed{\text{Capital Turnover Ratio} = \frac{\text{Sales}}{\text{Capital Employed}}}$$

Where **Sales** means Sales less sales returns and **Capital employed** refers to total long term funds of the business concern i.e., Equity share capital, Preference share capital, Reserves and surplus and Long term borrowed funds.

Illustration : 10

Calculate capital turnover ratio from the following information

	Rs.
Cash sales	2,00,000
Credit sales	1,75,000
Sales return	25,000
Equity Share Capital	1,00,000
Long term loan	50,000
Reserves	25,000

Solution:

$$\text{Capital Turnover Ratio} = \frac{\text{Sales}}{\text{Capital Employed}}$$

Net Sales = Cash sales + Credit sales – Sales returns

= 2,00,000 + 1,75,000 - 25,000

= Rs. 3,50,000

Capital Employed = Share capital + Long term loan + Reserves

= 1,00,000 + 50,000 + 25,000

= Rs. 1,75,000

$$\text{Capital Turnover Ratio} = \frac{3,50,000}{1,75,000} = 2 \text{ times}$$

2. Fixed Assets Turnover Ratio:

This shows how best the fixed assets are being utilised in the business concern. The relationship between Sales and Fixed assets is known as **Fixed assets turnover ratio**. The ratio is calculated as:

$$\boxed{\text{Fixed assets turnover Ratio} = \frac{\text{Sales}}{\text{Fixed assets}}}$$

Fixed assets means Fixed assets less depreciation.

Illustration : 11

Calculate the fixed asset turnover ratio from the following figures.

	Rs.
Sales	6,15,000
Sales Return	15,000
Fixed assets	1,50,000

Solution:

$$\text{Fixed assets turnover ratio} = \frac{\text{Sales}}{\text{Fixed assets}}$$

$$\text{Sales} = \text{Sales - Sales return}$$

$$= 6,15,000 - 15,000$$

$$= \text{Rs. } 6,00,000$$

$$\text{Fixed assets turnover ratio} = \frac{6,00,000}{1,50,000} = 4 \text{ Times}$$

3. Stock Turnover Ratio

This ratio is otherwise called as **inventory turnover ratio**. It indicates whether stock has been efficiently used or not. It establishes a relationship between the cost of goods sold during a particular period and the average amount of stock in the concern. The ratio is calculated as:

$$\boxed{\text{Stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}}$$

$$\text{Average stock} = \frac{\text{Opening stock + closing stock}}{2}$$

If information to calculate average stock is not given then closing stock may be taken as average stock.

Illustration : 12

Calculate stock turnover ratio from the following:

	Rs.
Cost of goods sold	6,75,000
Stock at the beginning of the year	1,00,000
Stock at the end of the year	1,25,000

Solution:

$$\text{Stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average stock}}$$

$$\text{Average stock} = \frac{\text{Opening Stock + Closing Stock}}{2}$$

$$= \frac{1,00,000 + 1,25,000}{2}$$

$$= \frac{2,25,000}{2}$$

$$= \text{Rs. } 1,12,500$$

$$\text{Stock turnover ratio} = \frac{6{,}75{,}000}{1{,}12{,}500} = 6 \text{ Times}$$

Illustration : 13

Calculate stock turnover ratio from the following information.

	Rs.
Sales	2,00,000
Gross profit	50,000
Stock	30,000

Solution:

$$\text{Stock turnover ratio} = \frac{\text{Cost of goods sold}}{\text{Average Stock}}$$

$$\begin{aligned}\text{Cost of goods sold} &= \text{Sales} - \text{Gross profit}\\ &= 2{,}00{,}000 - 50{,}000\\ &= \text{Rs. } 1{,}50{,}000\end{aligned}$$

$$\text{Stock turnover ratio} = \frac{1{,}50{,}000}{30{,}000} = 5 \text{ Times}$$

4. Debtors Turnover Ratio

This establishes the relationship between credit sales and average accounts receivable. Debtors turnover ratio indicates the efficiency of the business concern towards the collection of amount due from debtors. The ratio is calculated as:

$$\boxed{\text{Debtors turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Accounts Receivable}}}$$

Accounts receivable includes sundry debtors and bills receivable.

$$\text{Average accounts receivable} = \frac{\text{Opening (debtors + bills receivable)} + \text{Closing (debtors + bills receivable)}}{2}$$

In case credit sales is not given, total sales can be taken as credit sales.

Illustration : 14

Calculate Debtors turnover ratio from the following:

	Rs.		Rs.
Total sales	2,00,000	Cash sales	40,000
Opening debtors	35,000	Closing debtors	45,000

Solution:

$$\text{Debtors Turnover Ratio} = \frac{\text{Credit sales}}{\text{Average debtors}}$$

$$\begin{aligned}\text{Credit Sales} &= \text{Total sales - Cash sales}\\ &= 2{,}00{,}000 - 40{,}000\\ &= \text{Rs.}1{,}60{,}000\end{aligned}$$

$$\begin{aligned}\text{Average Debtors} &= \frac{\text{Opening Debtors + Closing Debtors}}{2}\\ &= \frac{35{,}000 + 45{,}000}{2}\end{aligned}$$

$$= \frac{80,000}{2}$$

$$= \text{Rs. } 40,000$$

$$\text{Debtors Turnover Ratio} = \frac{1,60,000}{40,000} = 4 \text{ Times}$$

5. Creditors Turnover Ratio:

This establishes the relationship between credit purchases and average accounts payable. Creditors turnover ratio indicates the period in which the payments are made to creditors. The ratio is calculated as:

$$\boxed{\text{Creditors turnover ratio} = \frac{\text{Credit Purchases}}{\text{Average Accounts payable}}}$$

Accounts payable include sundry creditors and bills payable.

$$\text{Average accounts payable} = \frac{\text{Opening (creditors + bills payable)} + \text{Closing (creditors + bills payable)}}{2}$$

In case credit purchases is not given total purchases can be taken as credit purchases.

Illustration : 15

Calculate creditors turnover ratio from the following:

	Rs.
Credit purchases	1,50,000
Opening creditors	36,000
Closing creditors	24,000

Solution:

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Average accounts payable}}$$

$$\text{Average Creditors} = \frac{36,000 + 24,000}{2}$$

$$= \frac{60,000}{2} = \text{Rs. } 30,000$$

$$= \frac{1,50,000}{30,000} = 5 \text{ Times}$$

(**Note:** All turnover ratios will be expressed in terms of times.)

Other Illustrations:

Illustration : 16

From the following calculate current ratio

Babu Co. Ltd.

Balance Sheet as on 31.3.04

Liabilities	Rs.	Assets	Rs.
Share capital	21,000	Fixed Assets	17,000
Reserves	4,000	Stock	6,000
Bank Overdraft	2,000	Debtors	3,200
Creditors	6,000	Cash	6,800
	33,000		33,000

Solution:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets = Stock + Debtors + Cash

= 6,000 + 3,200 + 6,800

= Rs. 16,000

Current Liabilities = Bank overdraft + Creditors

= 2,000 + 6,000

= Rs. 8,000

$$= \frac{16,000}{8,000} = 2:1$$

Illustration : 17

From the following Balance Sheet as on 31.3.2005, calculate current ratio and liquid ratio.

Pavithra Co. Ltd.

Balance Sheet as on 31.3.05

Liabilities	Rs.	Assets	Rs.
Equity share capital	40,000	Machinery	45,000
Profit & Loss A/c	4,000	Stock	22,000
Debentures	25,000	Debtors	19,000
Creditors	24,000	Cash	5,000
		Prepaid expenses	2,000
	93,000		93,000

Solution:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets = Stock + Debtors + Cash + Prepaid expenses

= 22,000 + 19,000 + 15,000 + 20,000

= Rs. 48,000

Current liabilities = Creditors

= Rs. 24,000

$$\text{Current Ratio} = \frac{48,000}{24,000} = 2:1$$

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

Liquid Assets = Current Asset – (Stock + Prepaid expenses)

= 48,000 – (22,000 + 2,000)

= 48,000 – 24,000

= Rs. 24,000

$$\text{Liquid Ratio} = \frac{24,000}{24,000} = 1:1$$

Illustration : 18

From the following, calculate Debt-Equity Ratio.

	Rs.		Rs.
Equity shares	1,00,000	General reserves	75,000
Debentures	75,000	Sundry creditors	40,000
Outstanding expenses	10,000		

Solution:

$$\text{Debt-Equity ratio} = \frac{\text{Long term Debt}}{\text{Shareholders funds}}$$

Long term Debt = Debentures

= Rs. 75,000

Shareholders funds = Equity shares + General Reserves

= 1,00,000 + 75,000

= Rs. 1,75,000

$$\text{Debt-Equity ratio} = \frac{75{,}000}{1{,}75{,}000} = 0.42 : 1$$

Illustration : 19

Calculate Gross Profit Ratio from the following:

	Rs.
Purchases	2,65,000
Opening stock	10,000
Closing stock	20,000
Sales	3,00,000

Solution:

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

Gross Profit = Sales — Cost of Goods Sold

Cost of goods sold = Opening stock + Purchases — Closing stock

= 10,000 + 2,65,000 — 20,000

= Rs. 2,55,000

Gross Profit = 3,00,000 — 2,55,000

= Rs. 45,000

$$\text{Gross Profit Ratio} = \frac{45{,}000}{3{,}00{,}000} \times 100$$

= 15%

Illustration : 20

From the following data, calculate the fixed asset turnover ratio.

	Rs.
Cash sales	1,00,000
Credit sales	1,20,000
Sales Returns	20,000
Fixed assets	45,000
Depreciation	5,000

Solution:

$$\text{Fixed Asset Turnover Ratio} = \frac{\text{Sales}}{\text{Fixed Assets}}$$

Sales = Cash sales + Credit sales — Sales Returns

= 1,00,000 + 1,20,000 – 20,000

= 2,20,000 – 20,000

= Rs. 2,00,000

Fixed Assets = Fixed Assets – Depreciation

= 45,000 – 5,000

= Rs. 40,000

$$\text{Fixed Asset Turnover Ratio} = \frac{2,00,000}{40,000} = 5 \text{ Times}$$

Illustration : 21

From the following trading account, calculate stock turnover ratio and gross profit ratio.

Trading Account of Mohammed Ali & Co.
for the year ended 31.3.2004

Particulars	Rs.	Particulars	Rs.
To Opening stock	40,000	By Sales	2,00,000
To Purchases	1,20,000	By Closing stock	20,000
To Carriage	10,000		
To Gross profit	50,000		
	2,20,000		2,20,000

Solution:

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

Cost of Goods Sold = Sales – Gross Profit

= 2,00,000 – 50,000

= Rs. 1,50,000

$$\text{Average Stock} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

$$= \frac{40,000 + 20,000}{2}$$

= Rs. 30,000

$$\text{Stock Turnover Ratio} = \frac{1,50,000}{30,000} = 5 \text{ Times}$$

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

$$= \frac{50,000}{2,00,000} \times 100$$

= 25%

Illustration : 22

From the following figures calculate creditors turnover ratio

	Rs.
Credit purchases	1,80,000
Bills payable	50,000
Creditors	40,000

Solution:

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Average Accounts Payable}}$$

Average accounts payable = Bills payable + Creditors

= 50,000 + 40,000

= Rs. 90,000

$$\text{Creditors Turnover Ratio} = \frac{1,80,000}{90,000} = 2 \text{ Times}$$

Illustration : 23

The following is the Trading & Profit and Loss Account of a firm for the year ended 31.3.04.

**Trading and Profit and Loss Account of Lilly & Co.
for the year ended 31.3.2003**

Particulars	Rs.	Particulars	Rs.
To Opening stock	35,000	By Sales	4,00,000
To Purchases	2,25,000	By Closing stock	50,000
To Wages	10,000		
To Gross profit	1,80,000		
	4,50,000		4,50,000
To Administration expenses	10,000	By Gross profit	1,80,000
To Interest	5,000	By Dividend	2,000
To Loss on sale of machinery	2,000		
To Selling expenses	10,000		
To Net Profit	1,55,000		
	1,82,000		1,82,000

Calculate profitability ratios.

Solution:

1. Gross Profit Ratio $= \dfrac{\text{Gross Profit}}{\text{Sales}} \times 100$

$= \dfrac{1,80,000}{4,00,000} \times 100$

$= 45\%$

2. Net Profit Ratio $= \dfrac{\text{Net Profit}}{\text{Sales}} \times 100$

$= \dfrac{1,55,000}{4,00,000} \times 100$

$= 38.75\%$

3. Operating Profit Ratio $= \dfrac{\text{Operating Profit}}{\text{Sales}} \times 100$

Operating Profit = Net Profit + Non-operating expenses – Non-operating income

= Net Profit + Interest + Loss on sale of machinery – Dividend

= 1,55,000 + 2,000 + 5,000 – 2,000

= Rs. 1,60,000

$$\text{Operating Profit Ratio} = \frac{1,60,000}{4,00,000} \times 100$$

= 40%

4. $$\text{Operating Ratio} = \frac{\text{Cost of goods + Operating Expenses}}{\text{Sales}}$$

Cost of goods sold = Sales – Gross Profit

= 4,00,000 – 1,80,000

= Rs. 2,20,000

Operating Expenses = Administration + Selling Expenses

= 10,000 + 10,000

= Rs. 20,000

$$\text{Operating Ratio} = \frac{2,20,000 + 20,000}{4,00,000} \times 100$$

= 60%*

*** Note :** Operating ratio = 100% — Operating profit ratio

= 100% — 40%

= 60%

Illustration : 24

From the given data, calculate

1. Gross Profit Ratio
2. Net Profit Ratio and
3. Current Ratio

	Rs.		Rs.
Sales	3,00,000	Cost of goods sold	2,00,000
Net Profit	30,000	Current Assets	60,000
Current liabilities	30,000		

Solution:

i) $$\text{Gross profit ratio} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

Gross Profit = Sales – Cost of Goods sold

= 3,00,000 – 2,00,000

= Rs. 1,00,000

$$\text{Gross Profit Ratio} = \frac{1,00,000}{3,00,000} \times 100 = 33.33\ \%$$

ii) $$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Sales}} \times 100$$

$$= \frac{30,000}{3,00,000} \times 100$$

$$= 10\%$$

iii) Current Ratio $= \dfrac{\text{Current Assets}}{\text{Current Liabilities}}$

$$= \frac{60,000}{30,000} = 2:1$$

Illustration : 25

From the following details calculate

1. Gross Profit Ratio
2. Net Profit Ratio
3. Stock Turnover Ratio
4. Debtors Turnover Ratio

	Rs.
Sales	1,50,000
Cost of Goods Sold	1,20,000
Opening Stock	29,000
Closing Stock	31,000
Debtors	15,000
Administration Expenses	15,000

Solution:

1) Gross Profit Ratio $= \dfrac{\text{Gross Profit}}{\text{Sales}} \times 100$

Gross Profit = Sales – Cost of goods sold

= 1,50,000 – 1,20,000

= Rs. 30,000

Gross Profit Ratio $= \dfrac{30,000}{1,50,000} \times 100 = 20\%$

2) Net Profit Ratio $= \dfrac{\text{Net Profit}}{\text{Sales}} \times 100$

Net Profit = Gross Profit – Administration Expenses

= 30,000 – 15,000

= Rs. 15,000

$$= \frac{15,000}{1,50,000} \times 100$$

= 10%

3) Stock Turnover Ratio $= \dfrac{\text{Cost of Goods Sold}}{\text{Average Stock}}$

$$\text{Average Stock} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

$$= \frac{29{,}000 + 31{,}000}{2}$$

$$= \text{Rs. } 30{,}000$$

$$= \frac{1{,}20{,}000}{30{,}000} = 4 \text{ Times}$$

4) $$\text{Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Accounts Receivable}}$$

$$= \frac{1{,}50{,}000}{15{,}000} = 10 \text{ Times}$$

Illustration : 26

From the Balance Sheet given below, calculate Current Ratio & Proprietory Ratio.

Balance Sheet of Ram & Co. Ltd. as on 31.3.2004

Liabilities	Rs.	Assets	Rs.
Share Capital	60,000	Fixed Assets	1,65,000
Reserves	45,000	Current Assets	75,000
Bank overdraft	70,000	Investments (long term)	35,000
Current liabilities	1,20,000	Preliminary expenses	10,000
		Goodwill	10,000
	2,95,000		2,95,000

Solution:

1. $$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current liabilities}}$$

$$= \frac{75{,}000}{1{,}20{,}000}$$

$$= 0.625 : 1$$

2) $$\text{Proprietory Ratio} = \frac{\text{Shareholders funds}}{\text{Tangible Assets}}$$

Shareholders funds = Share Capital + Reserves

= 60,000 + 45,000

= Rs.1,05,000

Tangible Assets = Fixed Assets + Current Assets + Investments

= 1,65,000 + 75,000 + 35,000

= Rs. 2,75,000

$$\text{Proprietory Ratio} = \frac{1{,}05{,}000}{2{,}75{,}000} = 0.382 : 1$$

$$= 0.382 : 1$$

Illustration : 27

Surya Ltd. provides the following information for the year ending 31.3.05. Calculate Gross Profit ratio, Net profit ratio, Operating profit ratio and Operating ratio.

	Rs.		Rs.
Sales	2,00,000	Gross Profit	80,000
Office Expenses	6,000	Selling Expenses	4,000
Finance expenses	3,000	Loss on sale of plant	400
Interest received	500	Net Profit	67,100

Solution:

1) Gross Profit ratio $= \dfrac{\text{Gross Profit}}{\text{Sales}} \times 100$

$= \dfrac{80,000}{2,00,000} \times 100$

$= 40\%$

2) Net Profit ratio $= \dfrac{\text{Net Profit}}{\text{Sales}} \times 100$

$= \dfrac{67,100}{2,00,000} \times 100$

$= 33.55\%$

3) Operating Profit Ratio $= \dfrac{\text{Operating Profit}}{\text{Sales}}$

Operating profit = Net Profit + Non-operating expenses – Non-operating Income

= Net Profit + Loss on sale of plant + Financial expenses – Interest received

$= 67,100 + 400 + 3,000 - 500$

$= \text{Rs. } 70,000$

$= \dfrac{70,000}{2,00,000} \times 100$

$= 35\%$

4) Operating Ratio $= \dfrac{\text{Cost of goods sold + Operating expenses}}{\text{Sales}}$

Cost of goods sold = Sales – Gross Profit

$= 2,00,000 - 80000$

$= \text{Rs.}1,20,000$

Operating expenses = Office expenses + Selling expenses

$= 6,000 + 4,000$

$= \text{Rs.}10,000$

$= \dfrac{10,000 + 1,20,000}{2,00,000} \times 100$

$= \dfrac{1,30,000}{2,00,000} \times 100$

$= 65\%$

Illustration : 28

From the following Profit and Loss Account of a company, ascertain the following ratios.

1. Gross Profit Ratio
2. Net Profit Ratio
3. Operating Ratio
4. Operating Profit Ratio
5. Stock Turnover Ratio

Trading and Profit & Loss Account for the year ending 31.3.2005

Dr | Cr

Particulars	Rs.	Particulars	Rs.
To Opening Stock	10,000	By Sales	56,000
To Purchase	44,000	By Closing stock	10,000
To Gross Profit	20,100		
	66,000		66,000
To Administration expenses	2,000	By Gross Profit	20,100
To Selling expenses	8,900	By Dividend	1,000
To Interest	3,000	By Profit on sale of investments	800
To Net Profit	8,000		
	21,900		21,900

Solution:

1) Gross Profit ratio $= \dfrac{\text{Gross Profit}}{\text{Sales}} \times 100$

$= \dfrac{20{,}100}{56{,}000} \times 100 = 35.89\ \%$

2) Net Profit ratio $= \dfrac{\text{Net Profit}}{\text{Sales}} \times 100$

$= \dfrac{8000}{56000} \times 100$

$= 14.29\ \%$

3) Operating Profit Ratio $= \dfrac{\text{Operating Profit}}{\text{Sales}} \times 100$

Operating Profit = Net Profit + Non-operating Expenses – Non Operating Income

= Net Profit + Interest – Profit on sale of investments + dividend

$= 8{,}000 + 3{,}000 - (1000 + 800)$

$= 11{,}000 - 1{,}800$

= Rs. 9,200

Operating Profit Ratio $= \dfrac{9{,}200}{56{,}000} \times 100$

$= 16.43\%$

4) Operating Ratio $= \dfrac{\text{Cost of goods sold} + \text{Operating Expenses}}{\text{Sales}} \times 100$

Gross Profit = Sales – Cost of goods sold

= 56,000 – 20,100

= Rs. 35,900

Operating expenses = Administration Expenses + Selling Expenses

= 2,000 + 8,900

= Rs. 10,900

$$= \frac{35,900 + 10,900}{56,000} \times 100$$

$$\text{Operating Ratio} = \frac{46,800}{56,000} \times 100 = 83.57\%$$

5. Stock Turnover Ratio $= \dfrac{\text{Cost of Goods Sold}}{\text{Average Stock}}$

$$\text{Average Stock} = \frac{\text{Opening Stock + Closing Stock}}{2}$$

$$= \frac{10,000 + 10,000}{2}$$

= Rs. 10,000

$$\text{Stock Turnover Ratio} = \frac{35,900}{10,000} = 3.59 \text{ times}$$

Illustration : 29

Calculate Debtors turnover ratio from the following.

Total Sales	10,000	Cash Sales	2,000
Opening Debtors	1,000	Closing Debtors	1,500
Opening Bills Receivable	750	Closing Bills Receivable	1,250

Solution:

$$\text{Debtor Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Accounts Receivable}}$$

Credit Sales = Total Sales – Cash Sales

= 10,000 – 2,000

= Rs. 8,000

$$\text{Average Accounts Receivable} = \frac{\text{Opening (Debtors + Bills receivables) + Closing (Debtors + Bills receivables)}}{2}$$

$$= \frac{(1,000 + 750) + (1,500 + 1,250)}{2}$$

$$= \frac{1,750 + 2,750}{2}$$

$$= \frac{4,500}{2} = \text{Rs. } 2,250$$

= Rs. 2,250

$$\text{Debtors Turnover Ratio} = \frac{8,000}{2,250} = 3.56 \text{ times.}$$

Table showing summary of Accounting Ratios

S.No	Description of the Ratio	Formula	Notes
1.	Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	Current assets include cash in hand, cash at bank, sundry debtors, bills receivable, marketable securities, stock and prepaid expenses. Current liabilities include Bank overdraft, sundry creditors, bills payable and outstanding expenses.
2.	Liquid Ratio	$\frac{\text{Liquid assets}}{\text{Current liabilities}}$	Liquid assets mean current assets less stock and prepaid expenses
3.	Absolute Liquid Ratio	$\frac{\text{Absolute Liquid assets}}{\text{Liquid liabilities}}$	Absolute Liquid assets means cash, bank and short term investment. Liquid liabilities means current liabilities less bank overdraft.
4.	Debt Equity Ratio	$\frac{\text{Long Term Debts}}{\text{Shareholders funds}}$	Long term debts include Debentures, long term loans from banks and financial institutions. Shareholders funds include Equity share capital, Preference share capital, Reserves and surplus.
5.	Proprietory Ratio	$\frac{\text{Shareholders funds}}{\text{Total tangible assets}}$	Tangible assets include all assets except goodwill, preliminary expenses etc.
6.	Gross Profit Ratio	$\frac{\text{Gross profit}}{\text{Sales}} \times 100$	Gross profit = Sales – Cost of goods sold. Cost of goods sold = Opening stock + Purchases – Closing stock

S.No	Description of the Ratio	Formula	Notes
			Net sales = Total sales (cash & credit) – Sales returns
7.	Net Profit Ratio	$\frac{\text{Net profit}}{\text{Sales}} \times 100$	Net profit = Gross profit – (Administration, Selling and distribution and financial expenses expenses)
8.	Operating Profit Ratio	$\frac{\text{Operating profit}}{\text{Sales}} \times 100$	Operating profit = Net profit + Non-operating expenses – Non-operating income [OR] Gross profit – Operating expenses
9.	Operating Ratio	$\frac{\text{Cost of goods sold + Operating expenses}}{\text{Sales}} \times 100$	
10.	Capital Turnover Ratio	$\frac{\text{Sales}}{\text{Capital Employed}}$	Capital employed = Equity share capital + Preference share capital + reserves and surplus + long term borrowed funds
11.	Fixed Assets Turnover Ratio	$\frac{\text{Sales}}{\text{Fixed Assets}}$	Fixed assets = Fixed assets – Depreciation
12.	Stock Turnover Ratio	$\frac{\text{Cost of goods sold}}{\text{Average stock}}$	Average stock = opening stock + closing stock divided by two.
13.	Debtors Turnover Ratio	$\frac{\text{Credit Sales}}{\text{Average accounts receivable (Debtors + Bills receivable)}}$	Average accounts receivable is calculated by dividing the opening balance of debtors and bills receivable and closing balance of debtors and bills receivable by two.

S.No	Description of the Ratio	Formula	Notes
14.	Creditors Turnover Ratio	$\frac{\text{Credit Purchases}}{\text{Average accounts payable}}$ (Creditors + Bills payable)	Average accounts payable is calculated by dividing the opening balance of creditors and bills payable and closing balance of creditors and bills payable by two.

QUESTIONS

I. Objective Type:

a) Fill in the blanks:

1. _______ is a mathematical relationship between two items expressed in quantitative form.
2. Ratio helps in _______ forecasting.
3. _______ Ratio measures the firm ability to pay off its current dues.
4. _______ are those assets which are easily convertible into cash.
5. Bank overdraft is an example of _______ liability.
6. Liquid ratio is used to assess the firm's _______ liquidity.
7. Liquid assets means current assets less _______ and _______.
8. _______ ratio is modified form of liquid ratio.
9. Liquid liabilities means current liabilities less _______.
10. Proprietory ratio shows the relathionship between _______ and total tangible assets.

11. Gross profit can be ascertained by deducting cost of goods sold from _______.
12. Stock turnover ratio is otherwise called as _______.
13. 100% – Operating profit ratio is equal to _______ ratio.
14. When total sales is Rs.2,00,000, cash sales is Rs.65,000, then credit sales will be Rs._______.
15. Liquid ratio is otherwise known as _______.

(Answer: 1. Ratio; 2. Financial; 3. Liquid; 4. Current Assets; 5. Current; 6. Short term; 7. Stock, prepaid expenses; 8. Absolute liquid; 9. Bank overdraft; 10. Shareholders fund / Proprietors fund; 11. Sales; 12. Inventory turnover ratio; 13. Operating ratio; 14. Rs.1,35,000; 15. Quick ratio (Acid test ratio))

b) Choose the correct answer:

1. All solvency ratios are expressed in terms of
   a) Proportion b) Times c) Percentage
2. All activity ratios are expressed in terms of
   a) Proportion b) Times c) Percentage
3. All profitability ratios are expressed in terms of
   a) Proportion b) Times c) Percentage
4. Liquid liabilities means
   a) Current liabilities b) Current liabilities – Bank overdraft
   c) Current liabilities + Bank overdraft
5. Shareholders funds includes
   a) Equity share capital, Preference share capital, Reserves & Surplus
   b) Loans from banks and financial institutions
   c) Equity share capital, Preference share capital, Reserves & Surplus and Loans from banks and financial institutions

6. Which of the following option is correct
   a) Tangible Assets = Land + Building + Furniture
   b) Tangible Assets = Land + Building + Goodwill
   c) Tabgible Assets = Land + Furniture + Goodwill + Copy right
7. Gross profit ratio establishes the relationship between
   a) Gross profit & Total sales
   b) Gross profit & Credit sales
   c) Gross profit & Cash sales
8. Opening stock is equal to Rs.10,000, Purchase Rs.2,00,000 and closing stock is Rs.5,000. Cost of goods sold is equal to
   a) Rs. 2,15,000 b)Rs. 2,10,000
   c) Rs. 2,05,000
9. Operating ratio is equal to
   a) 100 – Operating profit ratio
   b) 100 + Operating profit ratio
   c) Operating profit ratio
10. Total sales is Rs,3,40,000 and the gross profit made is Rs.1,40,000. The cost of goods sold will be ________
   a) Rs.2,00,000 b) Rs. 4,80,000 c) Rs. 3,40,000
11. Total sales of a business concern is Rs.8,75,000. If cash sales is Rs.3,75,000, then credit sales will be
   a) Rs.12,50,000 b) Rs.5,00,000 c) 12,00,000
12. Cost of goods sold is Rs.4,00,000 and average stock is Rs.80,000. Stock turnover ratio will be
   a) 5 times b) 4 times c) 7 times
13. Current assets of a business concern is Rs.60,000 and current liabilities are Rs.30,000.Current ratio will be
   a) 1 : 2 b) 1 : 1 c) 2 : 1

14. Equity share capital is Rs.2,00,000, Reserves & surplus is Rs.30,000. Debenture Rs.40,000 and the shareholders funds will be
   a) Rs.2,00,000 b) Rs. 2,30,000 c) Rs. 1,90,000

(Answers: 1. (a); 2. (b); 3. (c); 4. (b); 5. (a); 6. (a); 7. (a); 8. (c); 9. (a); 10. (a); 11. (b); 12. (a); 13. (c); 14. (b))

II. Other Questions :

1. What are the siginificance of financial statement analysis?
2. What are the limitations of financial statement analysis?
3. Explain current ratio.
4. What is the need for calculating Debt – Equity ratio?
5. What are profitability ratios?
6. What are operating expenses?
7. Write notes on operating ratio.
8. What are activity ratios?
9. What is debtors turnover ratio?
10. What is accounts receivable?
11. What is account payable?
12. Explain solvency ratios.
13. Write notes on capital turnover ratio.
14. What are current assets?
15. Write notes on net profit ratio.

III. Problems:

1. From the following, calculate the current ratio.

	Rs.
Cash in hand	2,00,000
Sundry debtors	80,000
Stock	1,20,000

Sundry creditors	1,50,000
Bills payable	50,000

(Answer: 2:1)

2. Calculate liquid ratio

	Rs.
Current assets	20,000
Stock	3,000
Prepaid expenses	1,000
Current liabilities	8,000

(Answer: 2:1)

3. From the following information, calculate current ratio and liquid ratio

	Rs.		Rs.
Cash	5,000	Debtors	29,000
Bills receivable	5,000	Short term investment	15,000
Stock	52,000	Prepaid expenses	2,000
Creditors	36,000	Bills payable	10,000
Outstanding expenses	8,000		

(Answer: Current ratio 2:1; Liquid ratio 1:1)

4. From the following, calculate Current ratio & Liquid ratio

Balance Sheet of Gopi Co.Ltd., as on 31.3.05

Liabilities	Rs.	Assets	Rs
Share Capital	6,300	Fixed Assets	5,100
Reserves	1,200	Stock	2,100
Bank overdraft	600	Debtors	960
Creditors	1,800	Cash	1,740
	9,900		9,900

(Answer: Current ratio 2:1; Liquid ratio 1.13:1)

5. From the following, you are required to calculate liquidity ratios.

Debtors	5,000	Creditors	4,000
Cash in hand	4,000	Bills payable	3,000
Cash at Bank	6,000	Outstanding expenses	250
Short Term Investments	2,000	Bills receivable	3,000
Prepaid expenses	1,000	Closing stock	8,000

(Answer : Current Ratio 4:1; Liquid Ratio 2.76:1; Absolute Ratio 1.66:1)

6. From the following information, calculate current ratio, liquid ratio & Absolute liquid ratio.

Cash	1,800	Creditors	5,000
Debtors	14,200	Outstanding expenses	1,500
Stock	18,000	Bank overdraft	7,500
Bills Payable	2,700		

(Answer: Current ratio 2.04:1; Liquid ratio 0.96:1; Absolute liquid ratio 0.196:1)

7. Calculate Debt - Equity ratio

	Rs.
Equity share capital	2,00,000
General Reserve	1,50,000
Long term loan	50,000
Debentures	1,00,000

(Answer: 0.43:1)

8. From the following, Calculate Gross Profit Ratio

	Rs.
Gross Profit	50,000
Sales	5,50,000
Sales Return	50,000

(Answer: 10%)

9. Calculate Gross Profit ratio

	Rs.
Sales	6,50,000
Cost of Goods sold	4,80,000
Sales Return	50,000

(Answer: 20%)

10. Calculate Capital turnover ratio

	Rs.		Rs.
Sales	10,20,000	Sales Returns	20,000
Equity Share Capital	1,00,000	Loans	25,000
Preference Share Capital	50,000	Reserves	25,000

(Answer: 5 Times)

11. From the following data, calculate the Fixed Asset Turnover ratio

	Rs.
Fixed Assets	3,00,000
Depreciation	1,00,000
Total Sales	8,50,000
Sales Returns	50,000

(Answer : 4 times)

12. Calculate Net Profit Ratio

	Rs.
Net Profit	4,000
Sales	44,000
Sales Return	4,000

(Answer: 10%)

13. Calculate Operating profit ratio

	Rs.		Rs.
Gross profit	1,00,000	Operating expenses	40,000
Sales	6,02,000	Sales return	2,000

(Answer: 10%)

14. Calculate Fixed Assets Turnover Ratio

	Rs.
Fixed asset	1,00,000
Depreciation	25,000
Sales	3,00,000

(Answer: 4 times)

15. Calculate Fixed Assets Turnover Ratio

	Rs.
Fixed Assets	1,50,000
Sales	4,50,000

(Answer: 3 times)

16. From the following, determine the stock turnover ratio

	Rs.
Opening Stock	40,000
Closing stock	30,000
Purchases	95,000

(Answer: 3 times)

17. Calculate Stock turnover ratio

	Rs.
Opening Stock	15,000
Closing Stock	25,000
Purchases	60,000

(Answer: 2.5 times)

18. Compute Debtors turnover ratio

	Rs.
Total Sales	7,50,000
Sales Return	50,000
Opening Debtors	1,17,000
Closing Debtors	83,000

(Answer: 7 times)

19. From the following, determine Debtors Turnover ratio

	Rs.		Rs.
Total Sales	1,75,000	Cash Sales	35,000
Sales Return	10,000	Opening Debtors	8,000
Closing Debtors	12,000		

(Answer: 13 times)

20. Calculate creditors turnover from the following information

	Rs.		Rs.
Total Purchases	85,000	Cash Purchases	20,000
Purchases Return	5,000	Opening Creditors	25,000
Closing Creditors	15,000		

(Answer: 3 times)

21. From the Trading & Profit & Loss Account of Fashion World Ltd., ascertain the profitability ratios.

Trading and Profit & Loss Account

Dr. **for the year ending 31.3.04** Cr.

Particulars	Rs.	Particulars	Rs.
To Opening Stock	20,000	By Sales	1,60,000
To Purchases	1,20,000	By Closing Stock	32,000
To Gross Profit (transferred to profit & loss A/c)	52,000		
	1,92,000		1,92,000
To Administration expenses	12,000	By Gross Profit	52,000
		By Dividend	400
To Selling expenses	8,000		
To Finance expenses	4,000		
To Loss on sale of furniture	500		
To Net Profit	27,900		
	52,400		52,400

(Answer: Gross Profit ratio 32.5.%; Net Profit ratio 17.44%; Operating Profit ratio 20%; Operating cost ratio 80%)

22. From the following, calculate Profitability ratios.

Trading & Profit and Loss of Ambika & Co.

Dr. **for the year ending 31.3.2004** Cr.

Particulars	Rs.	Particulars	Rs.
To Opening Stock	1,99,000	By Sales	17,00,000
To Purchase	11,19,000	By Closing stock	2,98,000
To Gross Profit	6,80,000		
	19,98,000		19,98,000
To Administration expenses	3,00,000	By Gross Profit	6,80,000
To Selling expenses	60,000	By Interest	18,000
To Financial expenses	30,000		
To Loss on sale of Plant	8,000		
To Net Profit	3,00,000		
	6,98,000		6,98,000

(Answer: Gross Profit ratio 40%; Net Profit ratio 17.65%; Operating Profit ratio 18.82%; Operating ratio 81.18%)

23. From the following Balance sheet, calculate Debtors turnover, creditors turnover, Capital turnover & Fixed asset turnover ratio.

Balance Sheet as on 31.3.04

Liabilities	Rs.	Assets	Rs.
Share Capital	4,00,000	Land & Building	3,00,000
Reserves	2,40,000	Plant & Machinery	1,60,000
Creditors	2,60,000	Stock	2,96,000
6% Debentures	60,000	Debtors	1,42,000
		Cash	62,000
	9,60,000		9,60,000

Additional Information:

Credit Purchases during the year	Rs. 10,40,000
Credit Sales during the year	Rs. 4,26,000

(Answer: Debtors turnover ratio - 3 times; Creditors turnover ratio - 4 times; Capital turnover ratio - 0.61 times, Fixed asset turnover ratio - 0.93 times)

24. From the following, calculate Operating profit ratio and Operating ratio, Gross profit ratio and Net profit ratio.

Sales	1,00,000	Dividend received	400
Gross profit	30,000	Net profit	26,600
Administration expenses	1,000		
Selling expense	2,000		
Loss on sale of investments	800		

(Answer: Gross profit ratio - 30%: Net profit ratio - 26.6%; Operating profit ratio - 27%; Operating ratio - 73%)

25. From the following Balance sheet of Mumthaj Industries Ltd., you required to calculate Debt-Equity ratio, Proprietary ratio, Current ratio, Fixed assets turnover ratio.

Balance Sheet as on 31.03.05

Liabilities	Rs.	Assets	Rs.
Share Capital	1,00,000	Fixed Assets	1,20,000
General Reserve	20,000	Current Assets	80,000
Debentures	30,000		
Current liabilities	50,000		
	2,00,000		2,00,000

Additional information : Credit sales during the year was Rs.4,80,000.

(Answer: Debt-Equity ratio - 0.25:1; Proprietory ratio - 0.6:1; Current ratio - 1.6:1; Fixed asset turnover ratio - 4 times)

26. From the following Balance sheet calculate 1. Current ratio, 2. Liquid ratio, 3. Debt-Equity ratio & 4. Proprietory ratio

Balance Sheet of Jasmine Ltd. as on 31.03.2004

Liabilities	Rs.	Assets	Rs.
Share Capital	20,000	Goodwill	12,000
Reserves	10,000	Fixed Assets	28,000
Loans	16,000	Stock	8,000
Creditors	10,000	Debtors	4,000
Bank overdraft	4,000	Bills receivable	2,000
		Cash	6,000
	60,000		60,000

(Answer: Current ratio 1.43:1; Liquid ratio 0.86:1; Debt-Equity ratio 0.53:1; Proprietory ratio 0.625:1)

27. Calculate Current Ratio, Liquid ratio, Absolute liquid ratio, Debtors turnover and Creditors turnover ratio from the following Balance Sheet

Balance sheet

Liabilities	Rs.	Assets	Rs.
Equity Share Capital	55,000	Land & Buildings	20,000
Preference share capital	15,000	Plant & Machinery	22,000
		Furniture & fixtures	3,000
General Reserve	25,000	Stock	47,000
Debentures	35,000	Bills Receivable	10,000
Bills payable	3,000	Debtors	23,000
Bank overdraft	3,000	Short term investments	5,000
Creditors	8,000	Prepaid expenses	1,000
Outstanding expenses	6,000	Cash	19,000
	1,50,000		1,50,000

Additional information:

Credit sales Rs. 1,65,000 Credit purchases Rs. 44,000

(Answer: Current ratio 5.25:1; Liquid ratio 2.85:1; Absolute liquid ratio 1.41:1; Debtors turnover ratio 5 times; Creditors turnover ratio 4 times)

28. The following is the summarised Trading and Profit and Loss A/c, for the year ending and the Balance Sheet as at that date:

Trading and Profit and Loss Account

Dr. **for the year ending 31.3.2005** Cr.

Particulars	Rs.	Particulars	Rs.
Opening Stock	10,000	By Sales	1,00,000
To Purchases	50,000	By Closing stock	15,000
To Direct expenses	5,000		
To Gross Profit c/d	50,000		
	1,15,000		1,15,000
To Administrative expenses	15,000	By Gross Profit b/d	50,000
To Interest	3,000		
To Selling expenses	12,000		
To Net Profit	20,000		
	50,000		50,000

Balance Sheet as on 31.3.2005

Liabilities	Rs.	Assets	Rs.
Capital	1,00,000	Land and Building	50,000
Current liabilities	40,000	Plant and Machinery	30,000
Profit and Loss A/c	20,000	Furniture	20,000
		Stock	15,000
		Sundry debtors	15,000
		Bills receivable	12,500
		Cash in hand & at bank	17,500
	1,60,000		1,60,000

From the above, calculate –

(i) Gross Profit Ratio, (ii) Current Ratio, (iii) Acid Test Ratio, (iv) Stock Turnover Ratio, (v) Fixed Assets Turnover Ratio.

(Answer: Gross Profit Ratio 50%; Current Ratio 1.5:1; Acid Test Ratio 1.125:1; Stock Turnover Ratio 4 times; Fixed Assets Turnover Ratio 1 time)

Chapter - 5

CASH BUDGET

Learning Objectives

After studying this Chapter, you will be able to

- *understand the meaning, definition, characteristics and advantages of Cash budget.*
- *prepare cash budget using receipts and payments method.*

Cash Budget is a component of two words - cash and budget. The term "cash" here stands for cash and bank balance. "Budget" means, in simple words, an estimate relating to future activities of an organisation.

5.1 Budget:

Budget is a blue print of future course of action and activities. Budget means expressing the future course of action of an organisation in quantitative terms.

Longman's Dictionary of Business English defines a budget as "an account of the probable future income and expenditure".

According to the **Institute of Cost and Management Accountants, London**, Budget is "a financial and/or quantitative statement, prepared and approved prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective".

5.1.1 Characteristics:

Budget has the following important characteristics

1. It is prepared in advance and relates to a future period.
2. It is expressed in terms of money and/or physical units.
3. It is a mean to achieve the planned objective.

In business, the different kinds of budgets are prepared to facilitate different aspects of the business concern. Such aspects relate to sales, purchases, production, overheads as well as financing of the business. One of the main budgets prepared by a business concern is **Cash Budget**.

5.2 Cash Budget:

Cash budget is one of the most important budgets prepared by a business concern as every transaction directly or indirectly deals with cash. **Cash budget** shows the estimate of cash receipts and cash payments from all sources over a specific period. This is also called as '**Finance Budget**'.

5.2.1 Advantages :

1. It helps in maintaining an adequate cash balance.
2. It provides the following useful information to the management
   a. to determine the future cash needs of a business concern
   b. to plan for financing those needs and
   c. to have control over cash balance of the business concern.

Thus, in short cash budget is an useful tool for financial planning.

5.2.2 Preparation of cash budget – Methods

There are three methods by which a cash budget is prepared. They are

1. Receipts and Payments Method
2. Adjusted Profit and Loss Account Method or Cash Flow Method
3. Balance Sheet Method

However, among the three methods only "Receipts and Payments Method" alone is discussed in this chapter.

Receipts and Payments Method

Under this method Cash budget projects the concern's cash receipts and payments for a certain period (budget period). It has two basic components:

1. Estimate of cash receipts and
2. Estimate of cash payments

Cash Receipts include:

- Cash sales
- Cash receivable from customers
- Business receipts like interest, commission, dividend etc
- Sale of assets
- Proceeds from issue of shares/debentures
- Loans borrowed

Cash Payments include:

- Cash purchases
- Cash payable to suppliers
- Business expenses like wages, office expenses, selling expenses, etc.

- Payment of interest, income tax, dividend etc.
- Purchase of assets
- Redemption of shares/debentures
- Repayment of loans

Steps in the preparation of cash budget

Step 1 → Take opening cash balance

Step 2 → Add the estimated total cash receipts for the month

Step 3 → Calculate the total cash available for the month

Step 4 → Less the estimated total cash payments during the month

Step 5 → Calculate the closing cash balance

Format:

Cash Budget for the period ——————

Particulars	Month 1 Rs.	Month 2 Rs.	Month 3 Rs.
Opening Cash Balance			
Add: Estimated cash receipts :			
Cash sales			
Cash receivable from customers			
Business receipts like Interest, commission, dividend etc			
Sale of assets			
Loans borrowed			
Proceeds from issue of shares/debentures			
Total cash available during the month			

Less: Estimated cash payments :			
Cash purchases			
Payable to suppliers			
Business expenses – wages, office expenses, selling expenses, etc			
Business Payments – Interest paid, income tax, dividend etc.			
Purchase of assets			
Repayment of loans			
Redemption of shares/debentures			
Total cash payments during the month			
Closing cash balance			

The closing cash balance of the current month will be the opening cash balance of the next month.

Illustration : 1

From the following information, prepare cash budget for June 2005.

Particulars	Rs.
Cash in hand 1.6.2005	10,000
Cash purchases for June, 2005	70,000
Cash sales for June, 2005	1,00,000
Interest payable in June, 2005	1,000
Purchase of Office furniture in June, 2005	2,500

Solution:

Cash Budget for the month June, 2005

Particulars	Rs.
Opening cash balance	10,000
Add: Estimated receipts:	
Cash Sales	1,00,000
Total cash available during the month	1,10,000
Less: Estimated cash payments:	
Cash purchases	70,000
Interest paid	1,000
Purchase of furniture	2,500
Total cash payments	73,500
Closing cash balance	36,500

Illustration :2

Prepare a cash budget for the months of June, July, August 2004 from the following information:

1) Opening cash balance in June Rs.7,000.
2) Cash sales for June Rs.20,000; July Rs.30,000 and August Rs.40,000.
3) Wages payable Rs.6,000 every month.
4) Interest receivable Rs.500 in the month of August.
5) Purchase of furniture for Rs.16,000 in July.
6) Cash Purchases for June Rs.10,000; July Rs.9,000 and August Rs.14,000.

Solution:

Cash Budget for the period June to August 2004

Particulars	June Rs.	July Rs.	August Rs.
Opening cash balance	7,000	11,000	10,000
Add: Estimated cash receipts :			
Cash sales	20,000	30,000	40,000
Interest	—	—	500
Total cash available during the month	27,000	41,000	50,500
Less: Estimated cash payments :			
Cash purchases	10,000	9,000	14,000
Payment of wages	6,000	6,000	6,000
Purchase of furniture	—	16,000	—
Total cash payments during the month	16,000	31,000	20,000
Closing cash balance	11,000	10,000	30,500

Note : The closing cash balance in June will be the opening cash balance in July.

Illustration : 3

From the following information, prepare a budget for three months from October 2003.

1) Opening cash balance in October Rs.3000.
2) Cash Sales October: Rs.25,000; November : Rs.20,000; December : Rs.15,000.

3) Credit purchases – September Rs.10,000; October Rs.12,000; November Rs.14,000; December Rs.16,000. The period of credit allowed by suppliers is one month.

4) Dividend to be received in December Rs.4,000.

5) Advance tax Rs.3,000 payable in October.

6) Sale of an old asset for Rs.12,000 during November.

Solution:

Cash Budget for the period October to December 2003

Particulars	October Rs.	November Rs.	December Rs.
Opening cash balance	3,000	15,000	35,000
Add: Estimated cash receipts :			
Cash sales	25,000	20,000	15,000
Dividend	—	—	4,000
Sale of asset	—	12,000	—
Total cash available during the month	28,000	47,000	54,000
Less: Estimated cash payments :			
Payment to suppliers	10,000	12,000	14,000
Advance income tax payable	3,000	—	—
Total cash payments during themonth	13,000	12,000	14,000
Closing cash balance	15,000	35,000	40,000

Note: The suppliers of goods have given one month credit, so the purchases made in September will be paid in October and those purchases in October will be paid in November, those purchases in November will be paid in December.

Illustration : 4

From the following information, prepare a cash budget for April, May and June 2005.

Month	Credit Sales Rs.	Credit Purchases Rs.	Office Expenses Rs.
February	45,000	30,000	8,000
March	55,000	25,000	7,000
April	60,000	20,000	7,000
May	60,000	40,000	9,000
June	65,000	40,000	9,000

1) Opening cash balance Rs.5000.

2) Credit allowed by suppliers is two months.

3) Credit allowed to customers is one month.

4) Office expenses are payable in the same month

5) Dividend Rs.1000 is receivable in April.

6) Interest payable in May Rs.1,800.

Solution:

Cash Budget for the period April to June, 2005

Particulars	April Rs.	May Rs.	June Rs.
Opening cash balance	5,000	24,000	48,200
Add: Estimated cash receipts :			
Cash receivable from customers	55,000	60,000	60,000
Dividend	1,000	—	—
Total cash available during the month	61000	84,000	1,08,200

Less: Estimated cash payments :			
Payments to suppliers	30,000	25,000	20,000
Office expenses	7,000	9,000	9,000
Interest payable	—	1,800	—
Total cash payments during the month	37,000	35,800	29,000
Closing cash balance	24,000	48,200	79,200

Illustration : 5

Prepare a cash budget for the months – March, April and May 2005 from the following information

Month	Credit Sales Rs.	Credit Purchase Rs.	Wages Rs.	Misc. Expenses Rs.	Office Expenses Rs.
January	60,000	36,000	9,000	4,000	2,000
February	82,000	38,000	8,000	3,000	1,500
March	84,000	33,000	10,000	4,500	2,500
April	78,000	35,000	8,500	3,500	2,000
May	56,000	39,000	9,500	4,000	1,000

Additional information :

1) Opening cash balance Rs.8,000.
2) Period of credit allowed to customers one month
3) Period of credit allowed by suppliers two months.
4) Wages and miscellaneous expenses are payable in the same month.
5) Lag in payment of office expenses is one month

Solution:

Cash Budget for the period March, April & May 2005

Particulars	March Rs.	April Rs.	May Rs.
Opening cash balance	8,000	38,000	69,500
Add: Estimated cash receipts :			
Cash receivable from customers	82,000	84,000	78,000
Total cash available during the month	90,000	1,22,000	1,47,500
Less: Estimated cash payments :			
Payments to suppliers	36,000	38,000	33,000
Wages	10,000	8,500	9,500
Office expenses	1,500	2,500	2,000
Miscellaneous expenses	4,500	3,500	4,000
Total cash payments during the month	52,000	52,500	48,500
Closing cash balance	38,000	69,500	99,000

Notes:

1. The closing cash balance in March will be the opening balance in April and so on.
2. Since credit allowed to customers is one month, the amount of credit sales in February is collected in March and so on.
3. Since credit allowed by suppliers is two months credit purchases of January is paid in March and so on.
4. Office expenses are paid in the next month, so office expenses for February will be paid in March and so on.

QUESTIONS

I. Objective Type:

a) Fill in the blanks:

1. The term 'cash' in cash budget stands for ___________ and ___________.
2. Cash budget is also called as ___________.
3. There are ___________ methods by which a cash budget is prepared.
4. The opening balance of cash in April is Rs.1250. Total receipts for the month are Rs.4300 and total payments amounted to Rs.3750. Opening balance of cash in May will be ___________
5. Cash budget is a useful tool for ___________.
6. The closing balance of one month will be the ___________ balance of the next month.

(Answers: 1. Cash balance, Bank balance; 2.Finance Budget; 3. Three; 4. Rs.1,800; 5. Financial Planning; 6. opening)

b) Choose the correct answer:

1. Budget is an estimate relating to ___________ period.
   a) future b) current c) past
2. Budget is expressed in terms of
   a) Money b) Physical units
   c) Money & Physical units
3. Cash budget deals with
   a) Estimated cash receipts b) Estimated cash payments
   c) Estimated cash receipts & Estimated cash payments

4. Purchase of Furniture is an example for
   a) Cash receipts b) Cash payments
   c) None of the above
5. The opening balance of cash in January is Rs.9,000. The estimated receipts are Rs.14,000 and the estimated payments are Rs.10,000. The opening balance of cash in February will be
   a) Rs. 21,000 b) Rs. 11,000 c) Rs. 13,000

(Answers: 1. (a); 2. (c); 3. (c); 4. (b); 5. (c))

II. Other Questions:

1. Define Budget
2. What are the characteristics of a budget?
3. Write notes on Cash budget
4. What are the advantages of cash budget?
5. List the methods that can be used for the preparation of the cash budget.
6. Give few examples for cash receipts?
7. Give few examples for cash payments?
8. Enumerate the steps in the preparation of cash budget.

III. Problems:

1. Prepare cash budget for the month of January 2005 from the following information
   a) Cash in hand (estimated) Rs.250
   b) Cash sales for January, 2005 Rs.6,500
   c) Wages for the month January Rs.2,375
   d) Cash purchases Rs.2,745
   e) Interest receivable on investments Rs.175.

(Answer: Balance of cash Rs.1,805)

2. Prepare cash budget for the month of October from the following information

a) Estimated cash balance on 1st October Rs.1,775

b) Credit sales :

August	Rs.14,000
September	Rs.16,000
October	Rs.17,000

Period of credit allowed to customers is one month

c) Credit purchases

August	Rs. 8,000
September	Rs.12,000
October	Rs.10,000

Period of credit allowed by suppliers is two months

d) Purchase of plant Rs. 7,000

e) Wages to be paid in October Rs. 2,000

(Answer: Rs. 775)

3. Prepare cash budget for the month of March from the following information

a) Estimated cash balance on 1st March Rs.8,775

b) Credit sales :

January	Rs.70,000
February	Rs.80,000
March	Rs.85,000

Period of credit allowed to customers is one month

c) Credit purchases

January	Rs. 40,000
February	Rs.60,000
March	Rs.50,000

Period of credit allowed by suppliers is two months

d) Purchase of plant Rs. 35,000

e) Wages to be paid in March Rs. 10,000

(Answer: Rs. 3,775)

4. Prepare cash budget for the months of June and July 2004.

a) Opening cash balance estimated in June Rs.4,025

b) Cash purchases in June Rs.12,000 and July Rs.16,000

c) Cash sales in June Rs.18,000 and July Rs.24,000

d) Salaries payable in June Rs.5,000 and July Rs.5,000

e) Repayment of a loan in July Rs.6,500

(Answer: Closing balance – June Rs.5,025; July Rs.1525)

5. Prepare a cash budget for the month of August and September 2004 from the following information

		Credit Sales Rs.	Credit Purchases Rs.	Wages Rs.	Selling Expenses Rs.
June	2004	1,87,000	1,24,800	12,000	8,600
July	2004	1,92,000	1,83,600	14,000	4,800
August	2004	1,94,000	1,46,000	11,000	6,600
September	2004	1,26,000	1,73,400	10,000	7,500

1. Suppliers allowed two months credit.
2. Customers were given one month credit.
3. Wages are payable in the same month.
4. Delay in payment of selling expenses was one month.
5. Commission receivable Rs.11,025 in August.
6. Estimated cash balance as on 1st August Rs.9,075

(Answer: August Rs. 71,500; September Rs.65,300)

6. Prepare a cash budget for the month of January, February and March 2005 from the following information

Month & Year		Credit purchases Rs.	Credit sales Rs.	Wages Rs.
November	2004	2,00,000	2,50,000	50,000
December	2004	3,00,000	3,50,000	60,000
January	2005	3,00,000	4,50,000	60,000
February	2005	4,00,000	2,00,000	80,000
March	2005	5,00,000	3,50,000	70,000

1. Expected Cash balance on 1.1.2005 is Rs.75,000
2. Suppliers allowed a credit period of two months
3. A credit period of two months is allowed to customers
4. Lag in payment of wages is one month

(Answer: January Rs.65,000; February Rs.55,000; March Rs. 1,25,000)

7. From the following, prepare a cash budget for August & September 2004

	July Rs.	August Rs.	September Rs.
Cash purchases	1,00,000	2,00,000	3,00,000
Cash sales	2,75,000	3,25,000	4,75,000
Credit purchase	1,45,000	2,45,000	3,25,000
Credit sales	2,75,000	3,45,000	4,00,000
Expenses	50,000	60,000	70,000

1. Estimated Opening balance of cash on 1st August Rs.80,000
2. Credit allowed by suppliers and to customer is one month
3. Expenses are payable in the same month
4. Dividend receivable in August is Rs.16,000
5. Commission payable in September is Rs.2,70,000.

(Answer: August Rs. 2,91,000; September Rs.2,26,000)

8. Prepare a cash budget for January, February and March 2005 from the following information

Month		Sales Rs.	Purchases Rs.	Expenses Rs.
December	2004	5,00,000	4,00,000	55,000
January	2005	6,00,000	6,00,000	65,000
February	2005	7,00,000	4,00,000	75,000
March	2005	8,00,000	5,00,000	85,000

1. All sales are for cash.
2. The period of credit allowed by the suppliers is one month.
3. Lag in payment of expenses is one month.
4. Opening cash balance on 1.1.05 is Rs.45,000.
5. In March, an asset for Rs.2,00,000 is to be purchased.

(Answer: January Rs.1,90,000; February Rs.2,25,000; March Rs.3,50,000)

9. From the following, prepare a cash budget for June & July 2005

	May Rs.	June Rs.	July Rs.
Cash purchases	50,000	1,00,000	1,50,000
Cash sales	1,37,500	1,62,500	2,37,500
Credit purchase	72,500	1,22,500	1,62,500
Credit sales	1,37,500	1,72,500	2,00,000
Expenses	25,000	30,000	35,000

1. Estimated Opening balance of cash on 1st June Rs.40,000
2. Credit allowed by suppliers and to customer is one month

3. Expenses are payable in the same month
4. Dividend receivable in June is Rs.8,000
5. Commission payable in July is Rs.1,35,000.

(Answer: June Rs. 1,45,500; July Rs.1,13,000)

10. Prepare a cash budget for October, November and December 2004 from the following information

Month		Sales Rs.	Purchases Rs.	Expenses Rs.
September	2004	10,00,000	8,00,000	1,10,000
October	2004	12,00,000	12,00,000	1,30,000
November	2004	14,00,000	8,00,000	1,50,000
December	2004	16,00,000	10,00,000	1,70,000

1. All sales are for cash.
2. The period of credit allowed by the suppliers is one month.
3. Lag in payment of expenses is one month.
4. Opening balance of cash on 1.10.04 is Rs.90,000.
5. In December, an asset for Rs.4,00,000 is to be purchased.

(Answer: October Rs.3,80,000; November Rs.4,50,000; December Rs.7,00,000)

11. Prepare a cash budget for the month of March, April and May 2005 from the following information

Month	Credit purchases Rs.	Credit sales Rs.	Administration & Selling expenses Rs.
January	75,000	1,50,000	1,20,000
February	1,00,000	1,35,000	1,35,000
March	85,000	1,75,000	65,000
April	1,25,000	1,20,000	70,000
May	90,000	1,40,000	80,000

1. Expected Cash balance on 1.3.2005 is Rs.80,000
2. Suppliers allowed a credit period of two months
3. A credit period of one month is allowed to customers
4. Expenses are paid in the same month.
5. Sale of fixed asset Rs. 25,000 in April.
6. Purchase of fixed asset in May Rs.25,000.

(Answer: March Rs.75,000; April Rs.1,05,000; May Rs. 35,000)

12. Prepare a Cash Budget of Rama Ltd., for the months of January to March 2004 from the following information:

	Credit Purchases Rs.	Credit Sales Rs.	Expenses Rs.
2003			
November	2,00,000	2,50,000	50,000
December	3,50,000	3,00,000	60,000
2004			
January	3,00,000	4,50,000	70,000
February	4,00,000	2,00,000	80,000
March	5,00,000	3,50,000	70,000

Additional Information:

i) Expected cash balance as on 1.1.2004 Rs.75,000
ii) Suppliers allowed credit of two months and a credit of two months is allowed to the customers
iii) Lag in payment of expenses one month.
iv) Sale of fixed assets in the month of February Rs. 95,000

(Answer: January Rs.65,000; February Rs.40,000; March Rs.1,10,000)