



**GOVERNMENT OF TAMILNADU**

**HIGHER SECONDARY SECOND YEAR**

# **ACCOUNTANCY**

**A publication under Free Textbook Programme of Government of Tamil Nadu**

**Department of School Education**

**Untouchability is Inhuman and a Crime**

## Government of Tamil Nadu

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**E-Book**



**Assessment**



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- Once the camera detects the QR code, a url appears in the screen.Click the url and goto the content page.

## Dear Students!

This Accountancy textbook is the source of knowledge to provide you with the basic understanding of Accountancy and to make use of your analytical ability to make you an excellent person in applying the accounting principles to real business situations through various activities given in the textbook.

The book contains 10 units, within which the subdivisions and various student activities are given in an organised way to make learning easy, systematic and a pleasure.

The method of using this book effectively to learn the concepts and methods contained in it and explanation of the important items included in the text book are given below to have a better learning experience.

### UNITS

Units are the broad divisions of the book which contain several subdivisions in each of them so that the students can have understanding of the specific substance in various parts of Accountancy education. Each unit gives the specialised knowledge on the content discussed. The units are to be learnt in the order given in the book to have continuity of learning and proper understanding of the subject matter.

### SUBDIVISIONS

All the 10 units in the textbook have been divided into subdivisions that give the basic theory and practice of Accountancy today in an orderly manner.

## HOW TO USE THE BOOK



### LEARNING OBJECTIVES

Learning objectives give the level of knowledge to be attained by the students while learning the contents given in the unit.



### POINTS TO RECALL

These help in proper understanding of the unit contents by providing a base for learning by recalling what is learnt earlier.

### KEY TERMS

The key terms are the important concepts that the students are to be thorough within each unit. The students must be clear about these concepts to have clarity of thought and an able learning about the subject matter.



This section of the unit gives the various information about the present or past events or useful practices in the field of Accountancy relevant to the subject matter discussed in the specific unit.



## STUDENT ACTIVITY

This is an exercise given to the students to do as class work or home work or as field work on the chosen topic in each unit. Accountancy education requires practical exposure to various business environment around the world. Student activity will ensure practical application of the principles learnt in the real business situations and help to develop the analytical and entrepreneurial ability of the students.



This is an online support to enrich learning. Using a smart phone with applied QR code app, the students can have access to short lectures or demonstrations by experts or experienced teachers. This is to be a leisure time exercise or else teachers can display them in class rooms.

## POINTS TO REMEMBER

It provides a summary of important subject matter discussed in the unit.

## SELF-EXAMINATION QUESTIONS

This section contains theoretical questions and practical problems to be answered by the students. Multiple choice questions help in thorough understanding of the concepts and procedures.



Case study helps in application of accounting principles and practices learnt in real business environment by analysing a particular situation. It enables the students to reach higher levels of knowledge, namely, applying, analysing, evaluating and creating new models.

## TO EXPLORE FURTHER

This section enables the students to make a further analysis of the concepts and methods learnt through browsing or learning from the reference books. This again is to enrich learning and to help the students to pursue higher education or professional courses.

## GLOSSARY

This section helps in understanding the important terminologies used in the text book through comparison of corresponding Tamil terms.

We wish you a meaningful and successful learning.

Team of Authors.

# SCOPE OF ACCOUNTANCY EDUCATION

“Accountancy” as a field of knowledge is all pervasive in nature. It offers enormous opportunities for higher education and employment both in India and abroad. The scope after higher secondary programme in Accountancy is given below:

## EDUCATIONAL OPPORTUNITIES

Any of the following Degree Programmes can be pursued by the students both on regular mode and distance education mode	Any of the following professional courses/ programmes	Any of the following programmes in India or abroad after a formal degree programme anywhere in colleges, Universities	Any of the following professional courses/ programmes after a formal degree programme	Any of the research programme after a formal post graduation
<ul style="list-style-type: none"> <li>• B.Com–Bachelor of Commerce (General)</li> <li>• B.Com–(Hons.)</li> <li>• B.Com–(Accounting &amp; Finance)</li> <li>• B.Com–(Corporate Secretaryship)</li> <li>• B.Com–(Computer Applications)</li> <li>• B.Com–(International Business)</li> <li>• B.Com–(Bank Management)</li> <li>• B.B.A–(Bachelor of Business Administration)</li> <li>• B.B.M–(Bachelor of Bank Management)</li> <li>• B.Com–(Co-operation)</li> <li>• M.Com–(Master of Commerce–Five year Integrated programme)</li> </ul>	<ul style="list-style-type: none"> <li>• CA–Chartered Accountancy</li> <li>• CMA–Cost and Management Accountancy</li> <li>• CS–Company Secretaryship</li> <li>• BL–Bachelor of Law – Five year Integrated Programme</li> <li>• CIMA (Chartered Institute of Management Accountants)</li> <li>• ACCA (Association of Chartered Certified Accountants (UK))</li> <li>• CPA (Certified Public Accountant (USA))</li> <li>• CFP–Certified Financial Planner(USA)</li> </ul>	<ul style="list-style-type: none"> <li>• M.Com– Master of Commerce</li> <li>• M.Com– (Accounting and Finance)</li> <li>• M.Com–(Corporate Secretaryship)</li> <li>• M.Com– (Computer Applications)</li> <li>• M.Com– (International Business and Banking)</li> <li>• M.Com– (Co operative Management)</li> <li>• M.B.A–Master of Business Administration</li> <li>• M.B.A–(Finance)</li> <li>• M.B.A–(Marketing)</li> <li>• M.B.A–(Human Resource Management)</li> <li>• M.B.A–(Advertisement and Salesmanship)</li> <li>• M.B.A–(Hospital Management)</li> <li>• MHRM (Master of Human Resource Management)</li> <li>• MLM (Master of Labour Management)</li> </ul>	<ul style="list-style-type: none"> <li>• Indian Administrative Service (IAS)</li> <li>• Indian Police Service (IPS)</li> <li>• Indian Foreign Service (IFS)</li> <li>• Indian Revenue Service (IRS)</li> <li>• Indian Audit and Account Service (IA&amp;AS)</li> <li>• B.Ed., (Bachelor of Education) and followed by</li> <li>• M.Ed., (Master of Education) Programmes</li> <li>• PG Diploma programme</li> </ul>	<ul style="list-style-type: none"> <li>• M.Phil– Master of Philosophy</li> <li>• Ph.D– Doctor of Philosophy</li> </ul>

## EMPLOYMENT OPPORTUNITIES

Accounts assistant	Accountant
Audit assistant	Cost analyst
Investment consultant	Financial advisor
Tax practitioner	Chartered Accountant
Company Secretary	Cost and Management Accountant
Teaching	State and Central Government jobs

## Details of some of the professional courses in India

Professional course	Name of the institute	Southern India Regional Office address	Chapters in Tamil Nadu
Chartered Accountancy	The Institute of Chartered Accountants of India <a href="http://www.icaai.org">www.icaai.org</a>	ICAI Bhawan, 122, Mahatma Gandhi Road Post box No.3314 Nungambakkam, Chennai - 600034	Coimbatore Erode Madurai Salem Tiruchirapalli Tirunelveli Tirupur Tuticorin Kanchipuram Kumbakonam Sivakasi
Company Secretaryship	The Institute of company secretaries of India <a href="http://www.icsi.edu">www.icsi.edu</a>	9,Wheat Crofts Road, Nungambakkam, Chennai-600034	Coimbatore Madurai Salem
Cost and Management Accountancy	The Institute of Cost Accountants of India <a href="http://www.icma.in">www.icma.in</a>	Southern India Regional Council, CMA Bhawan 4,Montieth Lane, Egmore Chennai - 600008	Coimbatore Erode Madurai Mettur-Salem Nellai-Pearl Neyveli Ranipet-Vellore Tiruchirapalli

## SCOPE ABROAD

Accountancy students have a wide range of scope abroad.

1. Higher studies
2. Employment opportunities as
  - Teachers
  - Accountants
  - Auditors
  - Financial consultants
  - Export and Import consultants
  - Tax advisors
  - Project consultants.





# UNIT 1

## ACCOUNTS FROM INCOMPLETE RECORDS



### Contents

- 1.1 Introduction
- 1.2 Meaning of incomplete records
- 1.3 Features of incomplete records
- 1.4 Limitations of incomplete records
- 1.5 Differences between double entry system and incomplete records
- 1.6 Accounts from incomplete records
- 1.7 Ascertaining profit or loss from incomplete records through statement of affairs
- 1.8 Preparation of final accounts from incomplete records



### Points to recall

The following points are to be recalled before learning accounts from incomplete records:

- ◇ Double entry system and its principles
- ◇ Types of accounts and rules of accounting
- ◇ Final accounts
- ◇ Treatment of adjustments such as bad debts, provision for bad and doubtful debts, depreciation, etc., in final accounts under double entry system.



### Learning objectives

- To enable the students to
- ◇ Understand the features and limitations of incomplete records
  - ◇ Prepare statement of affairs and calculate profit or loss from incomplete records
  - ◇ Prepare final accounts from incomplete records

### Key terms to know

- ◇ Incomplete records
- ◇ Statement of affairs
- ◇ Total debtors account
- ◇ Total creditors account



## 1.1 Introduction



### Student activity 1.1

Visit nearby petty shops. Observe for an hour. Do they record sale immediately after it takes place? Find out from the seller about how does he / she keep a track of the sales, expenses and profit.

Maintenance of accounting records as per double entry system is compulsory for certain organisations. For example, in India, companies must maintain accounting records under double entry system as per Section 128(1) of the Indian Companies Act, 2013. Such organisations must maintain accounts only under double entry system. Other organisations may or may not strictly follow the double entry system. Organisations in which double entry system is not strictly followed, accounting records may be maintained as per the requirements and desires of the proprietors and accountants. As the accounting records are not prepared in its entirety as under double entry system, these records are called incomplete records.

## 1.2 Meaning of incomplete records

When accounting records are not strictly maintained according to double entry system, these records are called incomplete accounting records. Generally, cash account and the personal accounts of customers and creditors are maintained fully and other accounts are maintained based on necessity.

Under this, some transactions are recorded fully, that is, for some transactions both the debit and credit aspects are entered. For example, both the aspects are entered for cash received from customers and cash paid to creditors. Some transactions are partially recorded, that is, only one aspect is entered. For example, expenses paid may be entered only in cash account. Some transactions are not recorded at all, that is, both the debit and credit aspects are not entered. For example, depreciation on fixed assets. Hence, these are usually called incomplete records.

It is an incomplete and unscientific way of book keeping. It was called single entry system of book keeping.

## 1.3 Features of incomplete records

Following are the features of incomplete records:

- (i) **Nature:** It is an unscientific and unsystematic way of recording transactions. Accounting principles and accounting standards are not followed properly.
- (ii) **Type of accounts maintained:** In general, only cash and personal accounts are maintained fully. Real accounts and nominal accounts are not maintained properly. Some transactions are completely omitted.
- (iii) **Lack of uniformity:** There is no uniformity in recording the transactions among different organisations. Different organisations record their transactions according to their needs and conveniences.

- (iv) **Financial statements may not represent true and fair view:** Due to the incomplete information and inaccurate records of accounts, the profit or loss calculated from these records cannot be relied upon. It may not represent true profitability. Assets and liabilities may not represent a true and fair view of financial position.
- (v) **Suitability:** Only the business concerns which have no legal obligation to maintain books of accounts under double entry system may maintain incomplete records. Hence, it may be maintained by small sized sole traders and partnership firms.
- (vi) **Mixing up of personal and business transactions:** Generally, personal transactions of the owners are mixed up with the business transactions. For example, purchase of goods for own use may be mixed up along with business purchases.

#### 1.4 Limitations of incomplete records

Following are the limitations of incomplete records:

- (i) **Lack of proper maintenance of records:** It is an unscientific and unsystematic way of maintaining records. Real and nominal accounts are not maintained properly.
- (ii) **Difficulty in preparing trial balance:** As accounts are not maintained for all items, the accounting records are incomplete. Hence, it is difficult to prepare trial balance to check the arithmetical accuracy of the accounts.
- (iii) **Difficulty in ascertaining true profitability of the business:** Profit is found out based on available information and estimates. Hence, it is difficult to ascertain true profit as the trading and profit and loss account cannot be prepared with accuracy.
- (iv) **Difficulty in ascertaining financial position:** In general, only the estimated values of assets and liabilities are available from incomplete records. Hence, it is difficult to ascertain true and fair view of state of affairs or financial position as on a particular date.
- (v) **Errors and frauds cannot be detected easily:** As only partial records are available, it may not be possible to have internal checks in maintaining accounts to detect errors and frauds.
- (vi) **Unacceptable to government and other authorities:** As accounts maintained are incomplete, these may not comply with the legal requirements. Hence, government, tax authorities and other legal authorities do not accept accounts prepared from incomplete records.

## 1.5 Differences between double entry system and incomplete records

Basis of distinction	Double entry system	Incomplete records
1. Recording of transactions	Both debit and credit aspects of all the transactions are recorded.	Debit and credit aspects of all the transactions are not recorded completely. For some transactions both aspects are entered, some transactions are partially recorded and some transactions are omitted to be entered.
2. Type of accounts maintained	Personal, real and nominal accounts are maintained fully.	In general, only personal and cash accounts are maintained fully. Real and nominal accounts are not maintained fully.
3. Preparation of trial balance	Trial balance can be prepared to check the arithmetical accuracy of the entries made in the books of accounts.	It is difficult to prepare the trial balance to check arithmetic accuracy of entries made in the books of accounts as the accounts are incomplete.
4. Determination of true profit or loss	Trading and profit and loss account can be prepared to find out the true profit or loss.	Trading and profit and loss account cannot be prepared with accuracy as complete information is not available and hence profit or loss found out may not be accurate.
5. Determination of financial position	Balance sheet can be prepared to know the true financial position.	Balance sheet cannot be prepared with accuracy and true financial position cannot be ascertained, as the assets and liabilities are just estimates and incomplete.
6. Suitability	It is suitable for all types of organisations.	It may be suitable for small sized sole traders and partnership firms.
7. Reliability	It is reliable since it is a scientific system of accounting and is based on certain accounting principles.	It is not reliable since it is unscientific.
8. Acceptability	Accounting records are acceptable to all users including tax authorities and financial institutions.	Accounting records may not be acceptable to all users.

## 1.6 Accounts from incomplete records

Ascertainment of profit or loss and financial position is essential also for organisations which maintain incomplete records. Based on available information in the incomplete records and from memory, profit or loss may be calculated. The difference between the capital at the end and the capital at the beginning may be considered as the profit as the profit is adjusted in capital in such entities. Also, with the available data, the missing figures can be found out and then the final accounts may be prepared.

## 1.7 Ascertaining profit or loss from incomplete records through statement of affairs

Under this method, by comparing the capital (net worth) at the beginning and at the end of a specified period profit or loss is found out. Any increase in capital (net worth) is taken as profit while a decrease in capital is regarded as loss.

Capital at the beginning and at the end can be found out by preparing statement of affairs in the beginning and at the end of an accounting year respectively. A statement of affairs is a statement showing the balances of assets and liabilities on a particular date. This method of ascertaining profit is also called as statement of affairs method or networth method or capital comparison method.

### 1.7.1 Calculation of profit or loss through statement of affairs

The difference between the closing capital and the opening capital is taken as profit or loss of the business. Due adjustments are to be made for any withdrawal of capital from the business and for the additional capital introduced in the business.

Take the closing capital as the base. Drawings made during the year should be added with the closing capital. This is because drawings would have reduced the closing capital. Additional capital introduced during the year should be subtracted. This is because the additional capital introduced would have increased the closing capital. This will give the adjusted closing capital.

$$\text{Adjusted closing capital} = \text{Closing capital} + \text{Drawings} - \text{Additional capital}$$

By comparing adjusted closing capital with the opening capital the profit or loss can be ascertained. If the difference is a positive figure it is profit and if it is negative it is loss.

$$\text{Closing Capital} + \text{Drawings} - \text{Additional Capital} - \text{Opening Capital} = \text{Profit/ Loss}$$

### Tutorial note

Opening capital + Additional capital + Profit/ – Loss – Drawings = Closing capital

Profit/Loss = Closing capital + Drawings – Additional capital – Opening capital

### 1.7.2 Steps to be followed to find out the profit or loss by preparing statement of affairs

Following are the steps to be followed to find out the profit or loss when a statement of affairs is prepared:

1. Ascertain the opening capital by preparing a statement of affairs at the beginning of the year by taking the opening balances of assets and liabilities.
2. Ascertain the closing capital by preparing a statement of affairs at the end of the accounting period after making all adjustments such as depreciation, bad debts, outstanding and prepaid expenses, outstanding income, interest on capital, interest on drawings, etc.
3. Add the amount of drawings (both in cash and/in kind) to the closing capital.
4. Deduct the amount of additional capital introduced, to get adjusted closing capital.
5. Ascertain profit or loss by subtracting opening capital from the adjusted closing capital.
  - (a) If adjusted closing capital is more than the opening capital, it denotes profit
  - (b) If adjusted closing capital is lesser than the opening capital, it denotes loss

Following format is used to find out the profit or loss:

#### Statement of profit or loss for the year ended .....

Particulars	₹
Capital at the end of the year	xxx
Add: Drawings during the year	xxx
	xxx
Less: Additional capital introduced during the year	xxx
Adjusted closing capital	xxx
Less: Opening Capital	xxx
Profit or loss for the year	xxx

#### Illustration 1

From the following particulars ascertain profit or loss:

	₹
Capital at the beginning of the year (1 <sup>st</sup> April, 2016)	2,00,000
Capital at the end of the year (31 <sup>st</sup> March, 2017)	3,50,000
Additional capital introduced during the year	70,000
Drawings during the year	40,000

### Solution

#### Statement of profit or loss for the year ended 31<sup>st</sup> March, 2017

Particulars	₹
Closing capital (as on 31.3.2017)	3,50,000
Add: Drawings during the year	40,000
	3,90,000
Less: Additional capital introduced during the year	70,000
Adjusted closing capital	3,20,000
Less: Opening capital (as on 1.4.2016)	2,00,000
Profit made during the year	<b>1,20,000</b>

### Illustration 2

From the following particulars ascertain profit or loss:

	₹
Capital as on 1 <sup>st</sup> April 2018	1,60,000
Capital as on 31 <sup>st</sup> March, 2019	1,50,000
Additional capital introduced during the year	25,000
Drawings made during the year	30,000

### Solution

#### Statement of profit or loss for the year ended 31<sup>st</sup> March, 2019

Particulars	₹
Closing capital (as on 31.3.2019)	1,50,000
Add: Drawings during the year	30,000
	1,80,000
Less: Additional capital introduced during the year	25,000
Adjusted closing capital	1,55,000
Less: Opening capital (as on 1.4.2018)	1,60,000
Loss incurred during the year	<b>(-) 5,000</b>

### Illustration 3

From the following details, calculate the missing figure.

	₹
Closing capital as on 31.3.2019	1,90,000
Additional capital introduced during the year	50,000
Drawings during the year	30,000
Opening capital on 1.4.2018	?
Loss for the year ending 31.3.2019	40,000

### Solution

#### Statement of profit or loss for the year ended 31<sup>st</sup> March, 2019

Particulars	₹
Closing capital (as on 31.3.2019)	1,90,000
Add: Drawings during the year	30,000
	2,20,000
Less: Additional capital introduced during the year	50,000
Adjusted closing capital	1,70,000
Less: Opening capital (as on 1.4.2018) (balancing figure)	<b>2,10,000</b>
Loss for the year ending 31.3.2019	(-) 40,000

### Illustration 4

From the following details, calculate the capital as on 31<sup>st</sup> December 2018:

	₹
Capital as on 1st January, 2018	27,500
Goods taken for the personal use of the proprietor	5,000
Additional capital introduced during the year	2,500
Profit for the year	10,000

### Solution

#### Statement of profit or loss for the year ended 31<sup>st</sup> December, 2018

Particulars	₹
Closing capital (as on 31.12.2018) (balancing figure)	<b>35,000</b>
Add: Drawings during the year (goods taken for personal use)	5,000
	40,000
Less: Additional capital introduced during the year	2,500
Adjusted closing capital	37,500
Less: Opening capital (as on 1.1.2018)	27,500
Profit made during the year	10,000

### Illustration 5

From the following details, calculate the missing figure:

	₹
Capital as on 1 <sup>st</sup> April, 2017	2,50,000
Capital as on 31 <sup>st</sup> March, 2018	2,75,000
Additional capital introduced during the year	30,000
Profit for the year	15,000
Drawings during the year	?



## Solution

### Statement of profit or loss for the year ended 31<sup>st</sup> March, 2018

Particulars	₹
Closing capital (as on 31.3.2018)	2,75,000
Add: Drawings during the year (balancing figure)	<b>20,000</b>
	2,95,000
Less: Additional capital introduced during the year	30,000
Adjusted closing capital	2,65,000
Less: Opening capital (as on 1.4.2017)	2,50,000
Profit made during the year	15,000



Drawings made during the year ₹ 20,000 can also be found out by preparing the capital account.

Dr.		Capital Account				Cr.	
Date	Particulars	J.F.	₹	Date	Particulars	J.F.	₹
2018				2017			
Mar. 31	To Drawings A/c (balancing figure)		20,000	Apr. 1	By Balance b/d		2,50,000
					By Cash A/c		30,000
31	To Balance c/d		<b>2,75,000</b>	2018			
				Mar. 31	By Profit		15,000
			2,95,000				2,95,000

### 1.7.3 Statement of affairs

A statement of affairs is a statement showing the balances of assets and liabilities on a particular date. The balances of assets are shown on the right side and the balances of liabilities on the left side. It is prepared from incomplete records to find out the capital of a business unit on a particular date. This statement resembles a balance sheet. The difference between the total of assets and total of liabilities is taken as capital.

$$\text{Capital} = \text{Assets} - \text{Liabilities}$$

Although the statement of affairs is a list of assets and liabilities, it is not called balance sheet because the values of all assets and liabilities shown in the statement of affairs are not fully based on the ledger balances. Some items are taken from accounts maintained, some items from relevant documents and some balances are mere estimates based on memory.

### 1.7.4 Format of statement of affairs

In the books of -----  
Statement of affairs as on -----

Liabilities	₹	Assets	₹
Sundry creditors	xxx	Cash in hand	xxx
Bills payable	xxx	Cash at bank	xxx
Outstanding expenses	xxx	Sundry debtors	xxx
Bank overdraft	xxx	Bills receivable	xxx
Capital (Balancing figure)	xxx	Stock-in-trade	xxx
		Prepaid expenses	xxx
		Fixed assets	xxx
	xxx		xxx

#### Illustration 6

Following are the balances of Shanthi as on 31<sup>st</sup> December 2018.

Particulars	₹	Particulars	₹
Bills receivable	6,000	Sundry creditors	25,000
Bills payable	4,000	Stock	45,000
Machinery	60,000	Debtors	70,000
Furniture	10,000	Cash	4,000

Prepare a statement of affairs as on 31<sup>st</sup> December 2018 and calculate capital as at that date.

#### Solution

In the books of Shanthi  
Statement of affairs as on 31<sup>st</sup> December, 2018

Liabilities	₹	Assets	₹
Sundry creditors	25,000	Cash	4,000
Bills payable	4,000	Stock	45,000
Capital (balancing figure)	<b>1,66,000</b>	Debtors	70,000
		Bills receivable	6,000
		Machinery	60,000
		Furniture	10,000
	1,95,000		1,95,000

### 1.7.5 Differences between Statement of affairs and Balance sheet

Basis of distinction	Statement of affairs	Balance sheet
1. Objective	Statement of affairs is generally prepared to find out the capital of the business.	Balance sheet is prepared to ascertain the financial position of the business.
2. Accounting system	Statement of affairs is prepared when double entry system is not strictly followed.	Balance sheet is prepared when accounts are maintained under double entry system.
3. Basis of preparation	It is not fully based on ledger balances. Wherever possible ledger balances are taken. Some items are taken from some source documents and some items are mere estimates.	It is prepared exclusively on the basis of ledger balances.
4. Reliability	It is not reliable as it is based on incomplete records.	It is reliable as it is prepared under double entry system.
5. Missing items	It is difficult to trace the items omitted as complete records are not maintained.	Since both the aspects of all transactions are duly recorded, items omitted can be traced easily.

#### Illustration 7

On 1<sup>st</sup> April 2017, Ganesh started his business with a capital of ₹ 75,000. He did not maintain proper book of accounts. Following particulars are available from his books as on 31.03.2018.

Particulars	₹	Particulars	₹
Cash	5,000	Debtors	16,000
Stock of goods	18,000	Creditors	9,000
Bills receivable	7,000	Cash at bank	24,000
Furniture	3,000	Bills payable	6,000
Land and buildings	30,000		

During the year he withdrew ₹ 15,000 for his personal use. He introduced further capital of ₹ 20,000 during the year. Calculate his profit or loss.

#### Solution

#### Statement of affairs of Ganesh as on 31<sup>st</sup> March, 2018

Liabilities	₹	Assets	₹
Creditors	9,000	Cash	5,000
Bills payable	6,000	Cash at bank	24,000
Capital (balancing figure)	<b>88,000</b>	Stock of goods	18,000
		Debtors	16,000
		Bills receivable	7,000
		Land and buildings	30,000
		Furniture	3,000
	1,03,000		1,03,000

### Tutorial note

For finding out the closing capital, Statement of affairs as on 31<sup>st</sup> March, 2018 is prepared.

#### Statement of profit or loss for the year ending 31<sup>st</sup> March, 2018

Particulars	₹
Closing capital as on 31.03.2018	88,000
Add: Drawings during the year	15,000
	1,03,000
Less: Additional capital introduced during the year	20,000
Adjusted closing capital	83,000
Less: Opening capital as on 01.04.2017	75,000
Profit made during the year ending 31.03.2018	8,000

### Illustration 8

David does not keep proper books of accounts. Following details are given from his records.

Particulars	1.4.2018 ₹	31.3.2019 ₹
Cash	43,000	29,000
Stock of goods	1,20,000	1,30,000
Sundry debtors	84,000	1,10,000
Sundry creditors	1,05,000	1,02,000
Loan	25,000	20,000
Business premises	2,50,000	2,50,000
Furniture	33,000	45,000

During the year he introduced further capital of ₹ 45,000 and withdrew ₹ 2,500 per month from the business for his personal use. Prepare statement of profit or loss with the above information.

### Solution

#### In the books of David

#### Calculation of opening capital

#### Statement of affairs as on 1<sup>st</sup> April, 2018

Liabilities	₹	Assets	₹
Sundry creditors	1,05,000	Cash	43,000
Loan	25,000	Stock of goods	1,20,000
Capital (balancing figure)	4,00,000	Sundry debtors	84,000
		Business premises	2,50,000
		Furniture	33,000
	5,30,000		5,30,000

## Calculation of closing capital

### Statement of affairs as on 31st March, 2019

Liabilities	₹	Assets	₹
Sundry creditors	1,02,000	Cash	29,000
Loan	20,000	Stock of goods	1,30,000
		Sundry debtors	1,10,000
Capital (balancing figure)	<b>4,42,000</b>	Business premises	2,50,000
		Furniture	45,000
	5,64,000		5,64,000

### Statement of profit or loss for the year ending 31<sup>st</sup> March, 2019

Particulars	₹
Closing capital as on 31.3.2019	4,42,000
Add: Drawings during the year (2,500 x 12)	30,000
	4,72,000
Less: Additional capital introduced during the year	45,000
Adjusted closing capital	4,27,000
Less: Opening capital as on 1.4.2018	4,00,000
Profit made during the year ending 31.3.2019	<b>27,000</b>



#### Student activity 1.2

**Think:** An additional capital of ₹ 45,000 has been introduced during the year. Observe the details given in the question. Think of any two reasons for the need for additional capital.

### Illustration 9

Ahmed does not keep proper books of accounts. Find the profit or loss made by him for the year ending 31<sup>st</sup> March, 2018.

Particulars	1.4.2017 ₹	31.3.2018 ₹
Bank balance	14,000 (Cr.)	18,000 (Dr.)
Cash in hand	800	1,500
Stock	12,000	16,000
Debtors	34,000	30,000
Plant	80,000	80,000
Furniture	40,000	40,000
Creditors	60,000	72,000

Ahmed had withdrawn ₹ 40,000 for his personal use. He had introduced ₹ 16,000 as capital for expansion of his business. A provision of 5% on debtors is to be made. Plant is to be depreciated at 10%.

**Solution****In the books of Ahmed****Calculation of opening capital****Statement of affairs as on 31<sup>st</sup> March, 2017**

Liabilities	₹	Assets	₹
Bank overdraft	14,000	Cash in hand	800
Creditors	60,000	Stock	12,000
Capital (balancing figure)	<b>92,800</b>	Debtors	34,000
		Plant	80,000
		Furniture	40,000
	1,66,800		1,66,800

**Calculation of closing capital****Statement of affairs as on 31<sup>st</sup> March, 2018**

Liabilities	₹	Assets	₹	₹
Creditors	72,000	Bank balance		18,000
Capital (balancing figure)	<b>1,04,000</b>	Cash in hand		1,500
		Stock		16,000
		Debtors	30,000	
		Less: Provision for doubtful debts @ 5%	1,500	28,500
		Plant	80,000	
		Less: Depreciation	8,000	72,000
		Furniture		40,000
	1,76,000			1,76,000

**Statement of profit or loss for the year ending 31<sup>st</sup> March, 2018**

Particulars	₹
Closing capital as on 31.3.2018	1,04,000
Add: Drawings during the year	40,000
	1,44,000
Less: Additional capital introduced during the year	16,000
Adjusted closing capital	1,28,000
Less: Opening capital as on 31.3.2017	92,800
Profit for the year ending 31.3.2018	<b>35,200</b>

## 1.8 Preparation of final accounts from incomplete records

When books of accounts are incomplete, information regarding revenues, expenses assets and liabilities is not known fully. Hence, it becomes difficult to prepare trading and profit and loss account and balance sheet. But with the available data, the missing figures can be found out and then the final accounts can be prepared.

### 1.8.1 Steps to be followed to prepare final accounts from incomplete records

Following are the steps to be followed to prepare final accounts from incomplete records:

1. Opening statement of affairs is to be prepared, to ascertain the opening capital.
2. Missing figures must be found out with the available data.

This can be done by preparing memorandum accounts or by making necessary adjustments to the existing figures. For example,

- (a) It may become necessary to prepare a cash book to find out the missing items such as cash purchases, cash sales, etc.
- (b) By preparing total debtors account and total creditors account, credit sales and credit purchases can be ascertained respectively.
- (c) Bills receivable account and bills payable account are to be prepared to find out the balances of bills receivable received and bills payable accepted respectively.

3. The final step is to prepare trading and profit and loss account and balance sheet.

Formats of important accounts, that is, total debtors account, bills receivable account, total creditors account and bills payable account are given below:

#### (i) Format of total debtors account

Dr.	Total debtors account		Cr.
Particulars	₹	Particulars	₹
To Balance b/d (opening balance)	xxx	By Cash A/c (received)	xxx
To Sales A/c (credit sales)	xxx	By Bank A/c (cheques received)	xxx
To Bank A/c (cheque dishonoured)	xxx	By Discount allowed A/c	xxx
To Bills receivable A/c (bills dishonoured)	xxx	By Sales returns A/c	xxx
		By Bad debts A/c	xxx
		By Bills receivable A/c (bills received)	xxx
		By Balance c/d (closing balance)	xxx
	xxx		xxx

### Illustration 10

Find out credit sales from the following information:

	₹
Debtors on 1 <sup>st</sup> January 2018	40,000
Cash received from debtors	1,00,000
Discount allowed	5,000
Sales returns	2,000
Debtors on 31 <sup>st</sup> December 2018	60,000

### Solution

Dr.		Total debtors account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	40,000	By Cash A/c (received)	1,00,000		
To Sales A/c (credit)	<b>1,27,000</b>	By Discount allowed A/c	5,000		
(balancing figure)		By Sales returns A/c	2,000		
		By Balance c/d	60,000		
	1,67,000		1,67,000		

### Illustration 11

From the following details find out total sales made during the year.

	₹
Debtors on 1 <sup>st</sup> April 2018	50,000
Cash received from debtors during the year	1,50,000
Returns inward	15,000
Bad debts	5,000
Debtors on 31 <sup>st</sup> March 2019	70,000
Cash Sales	1,40,000

Dr.		Total debtors account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	50,000	By Cash A/c	1,50,000		
To Sales A/c (credit)	<b>1,90,000</b>	By Returns inward A/c	15,000		
(balancing figure)		By Bad debts A/c	5,000		
		By Balance c/d	70,000		
	2,40,000		2,40,000		



$$\begin{aligned}
 \text{Total Sales} &= \text{Cash Sales} + \text{Credit Sales} \\
 &= ₹ 1,40,000 + ₹ 1,90,000 \\
 &= ₹ 3,30,000
 \end{aligned}$$

### (ii) Format of bills receivable account

Dr.		Bills receivable account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d (opening balance)	xxx	By Cash / Bank A/c (Bills receivable honoured)	xxx		
To Sundry debtors A/c (Bills receivable received during the year)	xxx	By Sundry debtors A/c (Bills receivable dishonoured)	xxx		
		By Balance c/d (closing balance)	xxx		
	xxx		xxx		

### Illustration 12

From the following particulars, prepare bills receivable account and compute the bills received from the debtors.

Particulars	₹
Opening bills receivable	20,000
Closing bills receivable	30,000
Cash received for bills receivable	60,000
Bills receivable dishonoured	5,000

### Solution

Dr.		Bills receivable account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	20,000	By Cash A/c	60,000		
To Debtors A/c (Bills received during the year – balancing figure)	75,000	By Debtors A/c (Bills receivable dishonoured)	5,000		
		By Balance c/d	30,000		
	95,000		95,000		

### Illustration 13

From the following particulars, calculate total sales.

Particulars	₹
Debtors on 1 <sup>st</sup> April 2017	1,50,000
Bills receivable on 1 <sup>st</sup> April 2017	40,000
Cash received from debtors	3,90,000
Cash received for bills receivable	90,000
Bills receivable dishonoured	10,000
Sales return	40,000
Bills receivable on 31 <sup>st</sup> March, 2018	30,000
Sundry debtors on 31 <sup>st</sup> March, 2018	1,30,000
Cash sales	2,00,000

### Solution

Dr.		Bills receivable account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	40,000	By Cash A/c	90,000		
To Debtors A/c*	<b>90,000</b>	By Debtors A/c	10,000		
(Bills received during the year – balancing figure)		(Bills receivable dishonoured)			
		By Balance c/d	30,000		
	1,30,000		1,30,000		

Dr.		Total debtors account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	1,50,000	By Cash A/c	3,90,000		
To Bills receivable A/c (dishonoured)	10,000	By Sales returns A/c	40,000		
To Sales A/c (credit)	4,90,000	By Bills receivable A/c*	90,000		
(balancing figure)		(bills received)			
		By Balance c/d	<b>1,30,000</b>		
	6,50,000		6,50,000		

Total Sales = Cash Sales + Credit Sales = ₹ 2,00,000 + ₹ 4,90,000 = ₹ 6,90,000.

(iii) Format of total creditors account

Dr.		Total creditors account		Cr.	
Particulars	₹	Particulars	₹		
To Cash A/c (paid)	xxx	By Balance b/d	xxx		
To Bank A/c (cheques paid)	xxx	(opening balance)			
To Bills payable A/c (bills accepted)	xxx	By Purchases A/c (credit purchases)	xxx		
To Discount received A/c	xxx	By Bank A/c	xxx		
To Purchase returns A/c	xxx	(cheques dishonoured)			
To Balance c/d (closing balance)	xxx	By Bills payable A/c (dishonoured )	xxx		
	xxx		xxx		

Illustration 14

From the following details, calculate credit purchases.

Particulars	₹
Creditors on 1st April, 2018	50,000
Returns outward	6,000
Cash paid to creditors	1,60,000
Creditors on 31st March, 2019	70,000

Solution

Dr.		Total creditors account		Cr.	
Particulars	₹	Particulars	₹		
To Cash A/c (paid)	1,60,000	By Balance b/d	50,000		
To Returns outward A/c	6,000	By Purchases A/c (Credit)	<b>1,86,000</b>		
To Balance c/d	70,000	(balancing figure)			
	2,36,000		2,36,000		

(iv) Format of bills payable account

Dr.		Bills payable account		Cr.	
Particulars	₹	Particulars	₹		
To Cash / Bank A/c (bills payable paid)	xxx	By Balance b/d (opening balance)	xxx		
To Sundry creditors A/c (bills payable dishonoured)	xxx	By Sundry creditors A/c (bills accepted)	xxx		
To Balance c/d (closing balance)	xxx				
	xxx				xxx

Illustration 15

From the following particulars calculate total purchases.

Particulars	₹
Sundry creditors on 1 <sup>st</sup> April, 2017	75,000
Bills payable on 1 <sup>st</sup> April, 2017	60,000
Paid cash to creditors	3,70,000
Paid for bills payable	1,00,000
Purchases returns	15,000
Cash purchases	3,20,000
Creditors on 31 <sup>st</sup> March, 2018	50,000
Bills payable on 31 <sup>st</sup> March, 2018	80,000

Solution

Dr.		Bills payable account		Cr.	
Particulars	₹	Particulars	₹		
To Cash A/c (bills paid)	1,00,000	By Balance b/d	60,000		
To Balance c/d	80,000	By Sundry creditors A/c (Bills accepted - balancing figure)	<b>1,20,000</b>		
	1,80,000				1,80,000

**Dr. Total creditors account Cr.**

Particulars	₹	Particulars	₹
To Cash A/c (paid)	3,70,000	By Balance b/d	75,000
To Purchases return A/c	15,000	By Purchases A/c (credit)	<b>4,80,000</b>
To Bills payable A/c (bills accepted)	1,20,000	(balancing figure)	
To Balance c/d	50,000		
	5,55,000		5,55,000

Total purchases = Cash purchases + Credit purchases

$$= ₹ 3,20,000 + ₹ 4,80,000 = ₹ 8,00,000$$

**Illustration 16**

From the following details you are required to calculate credit sales and credit purchases by preparing total debtors account, total creditors account, bills receivable account and bills payable account.

Particulars	Opening ₹	Closing ₹
Debtors	60,000	55,000
Bills receivable	5,000	1,000
Creditors	25,000	28,000
Bills payable	2,000	3,000
<b>Other information:</b>		
Cash received from debtors		1,30,000
Discount allowed to customers		5,500
Cash paid to creditors		70,000
Discount allowed by suppliers		3,500
Payments against bill payable		7,000
Cash received for bills receivable		14,000
Bills receivable dishonoured		1,200
Bad debts		3,500

### Solution

Dr.		Bills receivable account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	5,000	By Cash A/c	14,000		
To Debtors A/c	11,200	By Debtors A/c	1,200		
(Bills received - balancing figure )		(bills receivable dishonoured) By Balance c/d	1,000		
	16,200		16,200		

Dr.		Total debtors account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	60,000	By Cash A/c (received)	1,30,000		
To Bills receivable A/c (dishonoured)	1,200	By Discount allowed A/c	5,500		
To Sales A/c (credit)	1,44,000	By Bad debts A/c	3,500		
(balancing figure)		By Bills receivable A/c (bills received)	11,200		
		By Balance c/d	55,000		
	2,05,200		2,05,200		

Dr.		Bills payable account		Cr.	
Particulars	₹	Particulars	₹		
To Cash A/c (bills paid)	7,000	By Balance b/d	2,000		
To Balance c/d	3,000	By Sundry creditors A/c (bills accepted – balancing figure)	8,000		
	10,000		10,000		

Dr.		Total creditors account		Cr.	
Particulars	₹	Particulars	₹		
To Cash A/c (paid )	70,000	By Balance b/d	25,000		
To Discount received A/c	3,500	By Purchases A/c (credit)	<b>84,500</b>		
To Bills payable A/c (bills accepted)	8,000	(balancing figure)			
To balance c/d	28,000				
	<b>1,09,500</b>				<b>1,09,500</b>

### Illustration 17

From the following details of Abdul who maintains incomplete records, prepare Trading and Profit and Loss account for the year ended 31<sup>st</sup> March, 2018 and a Balance Sheet as on the date.

Particulars	1.4.2017 ₹	31.3.2018 ₹
Stock	1,00,000	50,000
Sundry debtors	2,50,000	3,50,000
Cash	25,000	40,000
Furniture	10,000	10,000
Sundry creditors	1,50,000	1,75,000

Other details:

	₹		₹
Drawings	40,000	Cash received from debtors	5,35,000
Discount received	20,000	Sundry expenses	30,000
Discount allowed	25,000	Capital as on 1.4.2017	2,35,000
Cash paid to creditors	4,50,000		

### Solution

Dr.		Total debtors account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	2,50,000	By Cash A/c (received)	5,35,000		
To Sales A/c (credit) (balancing figure)	<b>6,60,000</b>	By Discount allowed A/c	25,000		
		By Balance c/d	3,50,000		
	<b>9,10,000</b>				<b>9,10,000</b>

Dr.	Total creditors account		Cr.
Particulars	₹	Particulars	₹
To Cash A/c (paid)	4,50,000	By Balance b/d	1,50,000
To Discount received A/c	20,000	By Purchases A/c (credit)	<b>4,95,000</b>
To Balance c/d	1,75,000	(balancing figure)	
	<b>6,45,000</b>		<b>6,45,000</b>

**In the books of Abdul**

Dr.	Trading and Profit and loss account for the year ended 31st March, 2018		Cr.
Particulars	₹	Particulars	₹
To Opening stock	1,00,000	By Sales	6,60,000
To Purchases	4,95,000	By Closing stock	50,000
To Gross profit c/d	<b>1,15,000</b>		
	7,10,000		7,10,000
To Discount allowed	25,000	By Gross profit b/d	1,15,000
To Sundry expenses	30,000	By Discount received	20,000
To Net profit (transferred to capital account)	<b>80,000</b>		
	<b>1,35,000</b>		<b>1,35,000</b>

**Balance Sheet as on 31st March, 2018**

Liabilities	₹	₹	Assets	₹
Sundry creditors		1,75,000	Cash	40,000
Capital	2,35,000		Furniture	10,000
Add: Net profit	80,000		Stock	50,000
	<b>3,15,000</b>		Debtors	3,50,000
Less: Drawings	40,000	2,75,000		
		<b>4,50,000</b>		<b>4,50,000</b>



### Illustration 18

Bharathi does not maintain her books of accounts under double entry system. From the following details prepare trading and profit and loss account for the year ending 31<sup>st</sup> March, 2019 and a balance sheet as on that date.

Dr.		Cash Book		Cr.	
Receipts	₹	Payments	₹		
To balance b/d	32,000	By Purchases A/c	56,000		
To Sales A/c	1,60,000	By Creditors A/c	80,000		
To Debtors A/c	1,20,000	By General expenses A/c	24,000		
		By Wages A/c	10,000		
		By Balance c/d	1,42,000		
	3,12,000		3,12,000		

Other information:

Particulars	1.4.2018 ₹	31.3.2019 ₹
Stock of goods	40,000	60,000
Debtors	38,000	?
Creditors	58,000	52,000
Machinery	1,70,000	1,70,000

Additional information:	₹
(i) Credit purchases	74,000
(ii) Credit sales	1,40,000
(iii) Opening capital	2,22,000
(iv) Depreciate machinery by 10% p.a.	

### Solution

In the books of Bharathi

Dr.		Total debtors account		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	38,000	By Cash A/c (received)	1,20,000		
To Sales A/c (credit)	1,40,000	By Balance c/d (balancing figure)	58,000		
	1,78,000		1,78,000		
To Balance b/d	58,000				

**Dr. Trading and Profit and Loss Account for the year ended 31st March, 2019 Cr.**

Particulars	₹	Particulars	₹
To Opening stock	40,000	By Sales	
To Purchases		Cash	1,60,000
Cash	56,000	Credit	<u>1,40,000</u>
Credit	<u>74,000</u>	By Closing stock	60,000
To Wages	10,000		
To Gross profit c/d	<b>1,80,000</b>		
	<u>3,60,000</u>		<u>3,60,000</u>
To General expenses	24,000	By Gross profit b/d	1,80,000
To Depreciation on machinery	17,000		
To Net profit transferred to capital a/c	<b>1,39,000</b>		
	<u>1,80,000</u>		<u>1,80,000</u>

**Balance Sheet as on 31st March, 2019**

Liabilities	₹	₹	Assets	₹	₹
Capital	2,22,000		Cash		1,42,000
Add: Net profit	1,39,000	3,61,000	Stock of goods		60,000
Creditors		52,000	Debtors		58,000
			Machinery	1,70,000	
			Less: Depreciation	17,000	1,53,000
		<u>4,13,000</u>			<u>4,13,000</u>

**Illustration 19**

Arjun carries on grocery business and does not keep his books on double entry basis. The following particulars have been extracted from his books:

Particulars	1-4-2018 ₹	31-3-2019 ₹
Plant and machinery	20,000	20,000
Stock	9,000	16,000
Sundry debtors	2,000	5,300
Sundry creditors	5,000	4,000
Cash at bank	4,000	6,000

Other information for the year ending 31-3-2019 showed the following:

	₹
Advertising	4,700
Carriage inwards	8,000
Cash paid to creditors	64,000
Drawings	2,000

Total sales during the year were ₹ 85,000. Purchases returns during the year were ₹ 2,000 and sales returns were ₹ 1,000. Depreciate plant and machinery by 5%. Provide ₹ 300 for doubtful debts. Prepare trading and profit and loss account for the year ending 31st March, 2019 and a balance sheet as on the date.

### Solution

**In the books of Arjun**  
**Statement of affairs as on 1<sup>st</sup> April, 2018**

Liabilities	₹	Assets	₹
Creditors	5,000	Cash at bank	4,000
Opening capital (balancing figure)	<b>30,000</b>	Stock	9,000
		Sundry debtors	2,000
		Plant and machinery	20,000
	<b>35,000</b>		<b>35,000</b>

**Dr. Total creditors account Cr.**

Particulars	₹	Particulars	₹
To Cash A/c (paid)	64,000	By Balance b/d	5,000
To Purchases returns	2,000	By Purchases A/c (credit)	<b>65,000</b>
To Balance c/d	4,000	(balancing figure)	
	<b>70,000</b>		<b>70,000</b>

**Dr. Trading and Profit and Loss Account for the year ended 31<sup>st</sup> March, 2019 Cr.**

Particulars	₹	Particulars	₹
To Opening stock	9,000	By Sales	85,000
To Purchases		Less Returns	<u>1,000</u>
Credit	65,000	By Closing stock	16,000
Less Returns	<u>2,000</u>		
To Carriage inwards	8,000		
To Gross profit c/d	<b>20,000</b>		
	<b>1,00,000</b>		<b>1,00,000</b>
To Advertising	4,700	By Gross Profit b/d	20,000
To Depreciation on machinery	1,000		
To Provision for doubtful debts	300		
To Net profit transferred to capital a/c	<b>14,000</b>		
	<b>20,000</b>		<b>20,000</b>

### Balance Sheet as on 31<sup>st</sup> March, 2019

Liabilities	₹	₹	Assets	₹	₹
Capital	30,000		Cash at bank		6,000
Add: Net profit	14,000		Stock		16,000
	44,000		Sundry debtors	5,300	
Less: Drawings	2,000	42,000	Less: Provision	300	5,000
Sundry creditors		4,000	Plant and Machinery	20,000	
			Less: Depreciation	1,000	19,000
		46,000			46,000

#### Illustration 20

Pandian does not keep his books under double entry system. From the following information prepare trading and profit and loss account and balance sheet as on 31-12-2018.

	1-1-2018 ₹	31-12-2018 ₹
Furniture	30,000	30,000
Cash in hand	10,000	17,000
Debtors	40,000	60,000
Stock	28,000	11,000
Bills receivable	12,000	35,100
Bank loan	25,000	25,000
Creditors	15,000	16,000

	₹		₹
Cash sales	11,200	Credit sales	88,800
Cash purchases	4,250	Credit purchases	35,750
Carriage on purchases	3,000	Carriage on sales	700
Commission received	600	Interest on bank loan	2,500
Drawings	8,000	Additional capital	14,000
Salaries	8,900	Office rent	2,400

Adjustments:

Write off depreciation of 5% on furniture. Create a provision of 1% on debtors for doubtful debts.

## Solution

### In the books of Pandian Statement of affairs as on 1<sup>st</sup> January, 2018

Liabilities	₹	Assets	₹
Creditors	15,000	Cash in hand	10,000
Bank loan	25,000	Stock	28,000
Opening capital (balancing figure)	<b>80,000</b>	Debtors	40,000
		Bills receivable	12,000
		Furniture	30,000
	<b>1,20,000</b>		<b>1,20,000</b>

### Dr. Trading and Profit and Loss Account for the year ended 31<sup>st</sup> December, 2018 Cr.

Particulars	₹	Particulars	₹
To Opening stock	28,000	By Sales	
To Purchases		Cash	11,200
Cash	4,250	Credit	<u>88,800</u>
Credit	<u>35,750</u>	By Closing stock	11,000
To Carriage on purchases	3,000		
To Gross profit c/d	<b>40,000</b>		
	<b>1,11,000</b>		<b>1,11,000</b>
To Salaries	8,900	By Gross Profit b/d	40,000
To Carriage on sales	700	By Commission received	600
To Office rent	2,400		
To Interest on bank loan	2,500		
To Depreciation on furniture	1,500		
To Provision for doubtful debts	600		
To Net profit transferred to capital a/c	<b>24,000</b>		
	<b>40,600</b>		<b>40,600</b>

### Balance Sheet as on 31<sup>st</sup> December, 2018

Liabilities	₹	₹	Assets	₹	₹
Capital	80,000		Cash in hand		17,000
Add: Net profit	24,000		Stock		11,000
	1,04,000		Debtors	60,000	
Add: Additional capital	14,000		Less: Provision for doubtful debts	600	59,400
	1,18,000		Bills receivable		35,100
Less: Drawings	8,000	1,10,000	Furniture	30,000	
Bank loan		25,000	Less: Depreciation	1,500	28,500
Creditors		16,000			
		<b>1,51,000</b>			<b>1,51,000</b>

### Points to remember

- ❖ When accounting records are not strictly maintained according to double entry system they are called incomplete accounting records.
- ❖ In general, only cash and personal accounts are maintained fully.
- ❖ Any increase in capital is taken as profit while a decrease is regarded as loss.
- ❖ Closing Capital + Drawings – Additional Capital – Opening Capital = Profit/ Loss
- ❖ A statement of affairs is prepared to find out capital on a particular day by showing the balances of assets on the right side and the balances of liabilities on the left side.
- ❖ From the information available from incomplete records, and from other documents, the missing figures can be found out and then the final accounts can be prepared.

### Self-examination questions



#### I Multiple choice questions

##### Choose the correct answer

1. Incomplete records are generally maintained by
  - (a) A company
  - (b) Government
  - (c) Small sized sole trader business
  - (d) Multinational enterprises
2. Statement of affairs is a
  - (a) Statement of income and expenditure
  - (b) Statement of assets and liabilities
  - (c) Summary of cash transactions
  - (d) Summary of credit transactions
3. Opening statement of affairs is usually prepared to find out the
  - (a) Capital in the beginning of the year
  - (b) Capital at the end of the year
  - (c) Profit made during the year
  - (d) Loss occurred during the year
4. The excess of assets over liabilities is
  - (a) Loss
  - (b) Cash
  - (c) Capital
  - (d) Profit
5. Which of the following items relating to bills payable is transferred to total creditors account?
  - (a) Opening balance of bills payable
  - (b) Closing balance of bills payable
  - (c) Bills payable accepted during the year
  - (d) Cash paid for bills payable
6. The amount of credit sales can be computed from
  - (a) Total debtors account
  - (b) Total creditors account
  - (c) Bills receivable account
  - (d) Bills payable account

7. Which one of the following statements is not true in relation to incomplete records?
- It is an unscientific method of recording transactions
  - Records are maintained only for cash and personal accounts
  - It is suitable for all types of organisations
  - Tax authorities do not accept
8. What is the amount of capital of the proprietor, if his assets are ₹ 85,000 and liabilities are ₹ 21,000?
- (a) ₹ 85,000                      (b) ₹ 1,06,000                      (c) ₹ 21,000                      (d) ₹ 64,000
9. When capital in the beginning is ₹ 10,000, drawings during the year is ₹ 6,000, profit made during the year is ₹ 2,000 and the additional capital introduced is ₹ 3,000, find out the amount of capital at the end.
- (a) ₹ 9,000                      (b) ₹ 11,000                      (c) ₹ 21,000                      (d) ₹ 3,000
10. Opening balance of debtors: ₹ 30,000, cash received: ₹ 1,00,000, credit sales: ₹ 90,000; closing balance of debtors is
- (a) ₹ 30,000                      (b) ₹ 1,30,000                      (c) ₹ 40,000                      (d) ₹ 20,000

### Answers

1. (c)	2. (b)	3. (a)	4. (c)	5. (c)	6. (a)	7. (c)	8. (d)	9. (a)	10. (d)
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### II Very short answer questions

- What is meant by incomplete records?
- State the accounts generally maintained by small sized sole trader when double entry accounting system is not followed.
- What is a statement of affairs?

### III Short answer questions

- What are the features of incomplete records?
- What are the limitations of incomplete records?
- State the differences between double entry system and incomplete records.
- State the procedure for calculating profit or loss through statement of affairs.
- Differentiate between statement of affairs and balance sheet.
- How is the amount of credit sale ascertained from incomplete records?

### IV Exercises

- From the following particulars ascertain profit or loss:

Particulars	₹
Capital at the beginning of the year (1 <sup>st</sup> April, 2018)	5,00,000
Capital at the end of the year (31 <sup>st</sup> March, 2019)	8,50,000
Additional capital introduced during the year	1,20,000
Drawings during the year	70,000

(Answer: Profit: ₹ 3,00,000)

2. From the following particulars ascertain profit or loss

Particulars	₹
Capital as on 1 <sup>st</sup> January 2018	2,20,000
Capital as on 31 <sup>st</sup> December 2018	1,80,000
Additional capital introduced during the year	40,000
Drawings made during the year	50,000

(Answer: Loss: ₹ 30,000)

3. From the following details, calculate the missing figure.

Particulars	₹
Closing capital as on 31.3.2018	80,000
Additional capital introduced during the year	30,000
Drawings during the year	15,000
Opening capital on 01.4.2017	?
Loss for the year ending 31.3.2018	25,000

(Answer: Opening capital: ₹ 90,000)

4. From the following details, calculate the capital as on 31<sup>st</sup> December 2018.

Particulars	₹
Capital as on 1st January, 2018	1,00,000
Goods withdrawn for personal use by the owner	30,000
Additional capital introduced during the year	15,000
Profit for the year	60,000

(Answer: Closing capital: ₹ 1,45,000)

5. From the following details, calculate the missing figure:

Particulars	₹
Capital as on 1 <sup>st</sup> April, 2018	40,000
Capital as on 31 <sup>st</sup> March, 2019	50,000
Additional capital introduced during the year	7,000
Profit for the year	8,000
Drawings during the year	?

(Answer: Drawings: ₹ 5,000)

6. Following are the balances in the books of Thomas as on 31<sup>st</sup> March 2019.

Particulars	₹	Particulars	₹
Sundry creditors	6,00,000	Bills payable	1,20,000
Furniture	80,000	Cash in hand	20,000
Land and building	3,00,000	Bills receivable	60,000
Sundry Debtors	3,20,000	Stock	2,20,000

Prepare a statement of affairs as on 31<sup>st</sup> March 2019 and calculate capital as at that date.

(Answer: Capital: ₹ 2,80,000)



7. On 1<sup>st</sup> April 2018 Subha started her business with a capital of ₹ 1,20,000. She did not maintain proper book of accounts. Following particulars are available from her books as on 31.3.2019.

Particulars	₹	Particulars	₹
Bank overdraft	50,000	Stock-in-trade	1,60,000
Debtors	1,80,000	Creditors	90,000
Bills receivable	70,000	Bills payable	2,40,000
Computer	30,000	Cash in hand	60,000
Machinery	3,00,000		

During the year she withdrew ₹ 30,000 for her personal use. She introduced further capital of ₹ 40,000 during the year. Calculate her profit or loss.

**(Answer: Closing capital: ₹ 4,20,000; Profit: ₹ 2,90,000)**

8. Raju does not keep proper books of accounts. Following details are taken from his records.

Particulars	1.1.2018 ₹	31.12.2018 ₹
Cash at bank	80,000	90,000
Stock of goods	1,80,000	1,40,000
Debtors	90,000	2,00,000
Sundry creditors	1,30,000	1,95,000
Bank Loan	60,000	60,000
Bills payable	80,000	45,000
Plant and machinery	1,70,000	1,70,000

During the year he introduced further capital of ₹ 50,000 and withdrew ₹ 2,500 per month from the business for his personal use. Prepare statement of profit or loss with the above information.

**(Answer: Opening capital: ₹ 2,50,000; Closing capital: ₹ 3,00,000; Profit: ₹ 30,000)**

9. Ananth does not keep his books under double entry system. Find the profit or loss made by him for the year ending 31st March, 2019.

Particulars	31.3.2018 ₹	31.3.2019 ₹
Cash at Bank	5,000 (Dr.)	60,000 (Cr.)
Cash in hand	3,000	4,500
Stock of goods	35,000	45,000
Sundry Debtors	1,00,000	90,000
Plant and Machinery	80,000	80,000
Land and Buildings	1,40,000	1,40,000
Sundry Creditors	1,70,000	1,30,000

Ananth had withdrawn ₹ 60,000 for his personal use. He had introduced ₹ 17,000 as capital for expansion of his business. Create a provision of 5% on debtors. Plant and machinery is to be depreciated at 10%.

**(Answer: Opening capital: ₹ 1,93,000; Closing capital: ₹ 1,57,000; Profit: ₹ 7,000)**

10. Find out credit sales from the following information:

Particulars	₹
Debtors on 1 <sup>st</sup> April, 2018	1,00,000
Cash received from debtors	2,30,000
Discount allowed	5,000
Returns inward	25,000
Debtors on 31 <sup>st</sup> March 2019	1,20,000

(Answer: Credit sales: ₹ 2,80,000)

11. From the following details find out total sales made during the year.

Particulars	₹
Debtors on 1 <sup>st</sup> January 2018	1,30,000
Cash received from debtors during the year	4,20,000
Sales returns	35,000
Bad debts	15,000
Debtors on 31 <sup>st</sup> December 2018	2,00,000
Cash Sales	4,60,000

(Answer: Credit sales: ₹ 5,40,000; Total sales: ₹ 10,00,000)

12. From the following particulars, prepare bills receivable amount and compute the bills received from the debtors.

Particulars	₹
Bills receivable at the beginning of the year	1,40,000
Bills receivable at the end of the year	2,00,000
Cash received for bills receivable	3,90,000
Bills receivable dishonoured	30,000

(Answer: B/R received: ₹ 4,80,000)

13. From the following particulars, calculate total sales.

Particulars	₹	Particulars	₹
Debtors on 1 <sup>st</sup> April 2018	2,50,000	Bills receivable dishonoured	15,000
Bills receivable on 1 <sup>st</sup> April 2018	60,000	Returns inward	50,000
Cash received from debtors	7,25,000	Bills receivable on 31 <sup>st</sup> March, 2019	90,000
Cash received for bills receivable	1,60,000	Sundry debtors on 31 <sup>st</sup> March, 2019	2,40,000
Bad debts	30,000	Cash sales	3,15,000

(Answer: B/R received: ₹ 2,05,000; Credit sales: ₹ 9,85,000; Total sales: ₹ 13,00,000)

14. From the following details, calculate credit purchases.

Particulars	₹
Opening creditors	1,70,000
Purchase returns	20,000
Cash paid to creditors	4,50,000
Closing creditors	1,90,000

(Answer: Credit purchases: ₹ 4,90,000)

15. From the following particulars calculate total purchases.

Particulars	₹	Particulars	₹
Sundry creditors on 1 <sup>st</sup> January, 2018	30,000	Purchases returns	15,000
Bills payable on 1 <sup>st</sup> January, 2018	25,000	Cash purchases	2,25,000
Paid cash to creditors	1,20,000	Creditors on 31 <sup>st</sup> December, 2018	25,000
Paid for bills payable	30,000	Bills payable on 31 <sup>st</sup> December, 2018	20,000

(Answer: B/P accepted: ₹ 25,000; Credit purchases: ₹ 1,55,000; Total purchases: ₹ 3,80,000)

16. From the following details you are required to calculate credit sales and credit purchases by preparing total debtors account, total creditors account, bills receivable account and bills payable account.

Particulars	₹	Particulars	₹
<b>Balances as on 1st April 2018</b>		<b>Balances as on 31<sup>st</sup> March 2019</b>	
Sundry debtors	2,40,000	Sundry debtors	2,20,000
Bills receivable	30,000	Sundry creditors	1,50,000
Sundry creditors	1,20,000	Bills receivable	8,000
Bills payable	10,000	Bills payable	20,000
<b>Other information:</b>	<b>₹</b>		<b>₹</b>
Cash received from debtors	6,00,000	Payments against bill payable	30,000
Discount allowed to customers	25,000	Cash received for bills receivable	60,000
Cash paid to creditors	3,20,000	Bills receivable dishonoured	4,000
Discount allowed by suppliers	10,000	Bad debts	16,000

(Answer: B/R received: ₹ 42,000; Credit sales: ₹ 6,59,000;  
B/P accepted: ₹ 40,000; Credit purchases: ₹ 4,00,000)

17. From the following details of Rakesh, prepare Trading and Profit and Loss account for the year ended 31<sup>st</sup> March, 2019 and a Balance Sheet as on that date.

Particulars	31.3.2018 ₹	31.3.2019 ₹
Stock of goods	2,20,000	1,60,000
Debtors	5,30,000	6,40,000
Cash at bank	60,000	10,000
Machinery	80,000	80,000
Sundry creditors	3,70,000	4,20,000

Other details:

Particulars	₹	Particulars	₹
Rent paid	1,20,000	Cash received from debtors	12,50,000
Discount received	35,000	Drawings	1,00,000
Discount allowed	25,000	Cash sales	20,000
Cash paid to creditors	11,00,000	Capital as on 1.4.2018	5,20,000

(Answer: Credit sales: ₹ 13,85,000; Credit purchases: ₹ 11,85,000;

Gross profit: ₹ 1,60,000; Net profit: ₹ 50,000; Balance sheet total: ₹ 8,90,000)

18. Mary does not keep her books under double entry system. From the following details prepare trading and profit and loss account for the year ending 31<sup>st</sup> March, 2019 and a balance sheet as on that date.

Dr.		Cash Book		Cr.	
Particulars	₹	Particulars	₹		
To Balance b/d	1,20,000	By Purchases	1,50,000		
To Sales	3,60,000	By Creditors	2,50,000		
To Debtors	3,40,000	By Wages	70,000		
		By Sundry expenses	1,27,000		
		By Balance c/d	2,23,000		
	8,20,000		8,20,000		

Other information:

Particulars	1.4.2018	31.3.2019
Stock of goods	1,10,000	1,80,000
Sundry Debtors	1,30,000	?
Sundry Creditors	1,60,000	90,000
Furniture and fittings	80,000	80,000

Additional information:

	₹
Credit purchases	1,80,000
Credit sales	2,90,000
Opening capital	2,80,000

Depreciate furniture and fittings by 10% p.a.

(Answer: Closing debtors: ₹ 80,000; Gross profit: ₹ 3,20,000;

Net profit: ₹ 1,85,000; Balance sheet total: ₹ 5,55,000)

19. Arun carries on hardware business and does not keep his books on double entry basis. The following particulars have been extracted from his books:

Particulars	31.12.2017 ₹	31.12.2018 ₹
Land and building	2,40,000	2,40,000
Stock-in-trade	1,20,000	1,70,000
Debtors	40,000	51,500
Creditors	50,000	45,000
Cash at bank	30,000	53,000

Other information for the year ending 31.12.2018 showed the following:

	₹
Wages	65,000
Carriage outwards	7,500
Sundry expense	28,000
Cash paid to creditors	6,00,000
Drawings	10,000

Total sales during the year were ₹ 7,70,000. Purchases returns during the year were ₹ 30,000 and sales returns were ₹ 25,000. Depreciate land and buildings by 5%. Provide ₹ 1,500 for doubtful debts. Prepare trading and profit and loss account for the year ending 31<sup>st</sup> December, 2018 and a balance sheet as on that date.

**(Answer: Opening capital: ₹ 3,80,000; Credit purchases: ₹ 6,25,000;  
Gross profit: ₹ 1,35,000; Net profit: ₹ 86,000; Balance sheet total: ₹ 5,01,000)**

20. Selvam does not keep his books under double entry system. From the following information prepare trading and Profit and loss A/c and Balance Sheet as on 31-12-2018

Particulars	1-1-2018	31-12-2018
	₹	₹
Machinery	60,000	60,000
Cash at bank	25,000	33,000
Sundry debtors	70,000	1,00,000
Stock	45,000	22,000
Bills receivable	20,000	38,000
Bank loan	45,000	45,000
Sundry creditors	25,000	21,000

	₹		₹
Cash sales	20,000	Credit sales	1,80,000
Cash purchases	8,000	Credit purchases	52,000
Wages	6,000	Salaries	23,500
Advertisement	7,000	Interest on bank loan	4,500
Drawings	60,000	Additional capital	21,000

Adjustments:

Write off depreciation of 10% on machinery. Create a reserve of 1% on debtors for doubtful debts.

**(Answer: Opening capital: ₹ 1,50,000;  
Gross profit: ₹ 1,11,000; Net profit: ₹ 69,000; Balance sheet total: ₹ 2,46,000)**



### Student activity 1.3

#### Fill in the missing information

Closing capital ₹	Drawings ₹	Additional capital ₹	Opening capital ₹	Profit / Loss ₹
1,00,000	40,000	20,000	90,000	?
?	30,000	40,000	80,000	20,000
70,000	?	30,000	40,000	10,000
60,000	20,000	?	50,000	- 10,000
2,00,000	30,000	10,000	?	1,20,000

#### CASE STUDY

Deepa is a sole trader. She does not maintain full set of accounting records. She maintains cash book and personal accounts. She has an assistant who maintains the books of accounts. On the last day of the accounting period, her assistant left the job. On checking the physical cash balance with the cash book, Deepa realised that some cash was missing. She provides you with the following information. Calculate the missing cash.

- 1) All sales were made on cash basis. There was no income other than sales.
- 2) She had ₹ 25,000 cash in hand at the beginning of the year and ₹ 12,000 at the end of the year.
- 3) Sales made during the year were ₹ 80,000.
- 4) She had taken some of the money for her personal use but does not have record of the same.
- 5) Capital at the beginning of the year was ₹ 25,000 and at the end of the year was ₹ 32,000
- 6) Profit for the year was ₹ 35,000
- 7) Purchases and other expenses were ₹ 55,000

#### To explore further

Is it possible to calculate gross profit when sales data are available but stock records are not kept in detail?

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# UNIT 2

## ACCOUNTS OF NOT-FOR-PROFIT ORGANISATION



### Contents

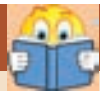
- 2.1 Introduction
- 2.2 Features of not-for-profit organisations
- 2.3 Receipts and Payments Account
- 2.4 Items peculiar to not-for-profit organisations
- 2.5 Income and Expenditure Account
- 2.6 Balance Sheet



### Points to recall

The following points are to be recalled before learning the accounts of not-for-profit organisation:

- ◇ Capital expenditure
- ◇ Revenue expenditure
- ◇ Deferred revenue expenditure
- ◇ Capital receipt
- ◇ Revenue receipt
- ◇ Final accounts of sole proprietors



### Learning objectives

- To enable the students to
- ◇ Understand the features of not-for-profit organisation
  - ◇ Understand the accounting treatment of items peculiar to not-for-profit organisation
  - ◇ Prepare final accounts of not-for-profit organisation

### Key terms to know

- ◇ Not-for-profit organisation
- ◇ Receipts and payments account
- ◇ Income and expenditure account



## 2.1 Introduction

Some organisations are established for the purpose of rendering services to the public without any profit motive. They may be created for the promotion of art, culture, education, sports, etc. These organisations are called not-for-profit organisation. Charitable institutions, educational institutions, cultural societies, sports and recreation clubs, hospitals, libraries and literary associations are some of the examples of not-for-profit organisations. They are also called as non-profit organisations or non-trading concerns. They raise funds through donations, grants from government and subscriptions from their members and so on. These concerns must also maintain proper books of accounts. They must account for all cash receipts and payments. At the end of each accounting year, they must also prepare final accounts to ascertain the surplus or deficit and financial position.

## 2.2 Features of not-for-profit organisations

Following are the features of not-for-profit organisations:

1. Not-for-profit organisations are the organisations which function without any profit motive.
2. Their main aim is to provide services to a specific group or the public at large.
3. Generally, they do not undertake business or trading activities.
4. Their main sources of income include subscription from members, donations, grant-in-aid and legacies.



### Student activity 2.1

Assume you want to start a drama club. What is the procedure to start the club? Give a name and design the logo for your club.

At the end of the accounting period, the following final accounts are prepared by not-for-profit organisations:

- (i) Receipts and payments account,
- (ii) Income and expenditure account and
- (iii) Balance sheet

Not-for-profit organisations registered under Section 8 of the Indian Companies Act, 2013 are required to prepare their Income and Expenditure account and Balance Sheet as per Schedule III to the Indian Companies Act, 2013.

**Note:** In this unit, only the not-for-profit organisations not registered under the Indian Companies Act, 2013 are dealt with. Hence, Income and Expenditure account and Balance Sheet are not prepared as per Schedule III of the Indian Companies Act, 2013.





### Student activity 2.2

Visit a nearby not-for-profit organisation and interact with the accountants to know about the various books maintained by them.

## 2.3 Receipts and Payments Account

Receipts and Payments account is a summary of cash and bank transactions of not-for-profit organisations prepared at the end of each financial year.

It is a real account in nature. The receipts and payments account begins with the opening balances of cash and bank and ends with closing balances of cash and bank. All cash receipts are shown on the debit side and all cash payments are shown on the credit side of this account. All cash receipts and cash payments whether of capital or revenue nature will be recorded in the receipts and payments account. They may relate to the current year or the previous years or the subsequent years. It means that irrespective of the period for which the amount is received or paid, it is recorded if cash is received or paid during the year.

Non-cash items such as depreciation, outstanding expenses and accrued income are not shown in receipts and payments account.

### 2.3.1 Steps in preparation of receipts and payments account

Following are the steps involved in the preparation of receipts and payments account:

- (i) Record the opening balance of cash in hand and favourable bank balance on the debit side of receipts and payments account. If there is bank overdraft, it must be recorded on the credit side.
- (ii) Actual cash receipts during the year are recorded on the debit side and actual cash payments during the year are recorded on the credit side.
- (iii) While recording cash receipts and payments, no distinction needs to be made between revenue and capital items. Similarly, no distinction needs to be made whether the amount received or paid relates to the current period, previous period or future period.
- (iv) If the total of the debit side is more than the credit side, the balancing figure will appear on the credit side. It represents the closing balance of cash or bank.
- (v) If the total of the credit side is more than the debit side, the balancing figure will appear on the debit side. It represents bank overdraft.

## Format of Receipts and Payment Account

Dr.    **Receipts and Payments Account of .....** for the year ending .....

Cr.

Receipts	₹	₹	Payments	₹	₹
To Balance b/d			By Balance b/d		
Cash in hand	xxx		Bank overdraft		xxx
Cash at bank	xxx	xxx			
<b>Revenue receipts:</b>			<b>Revenue payments:</b>		
To Subscription		xxx	By Salaries		xxx
To Entrance fees		xxx	By Rent paid		xxx
To General donations		xxx	By Electricity charges		xxx
To Grant-in-aid		xxx	By Postage		xxx
To Sale of old newspapers		xxx	By Rent and taxes		xxx
To Interest on investment		xxx	By Insurance		xxx
To Dividend		xxx	By Advertisement		xxx
To Locker rent received		xxx	By Telephone charges		xxx
To Rent received		xxx	By Entertainment expenses		xxx
To Sundry receipts		xxx	By Audit fees		xxx
			By Repairs		xxx
<b>Capital receipts:</b>			By Upkeep of ground		xxx
To Life membership fees		xxx	By Conveyance charges		xxx
To Donation for specific purpose		xxx	By Newspapers and periodicals		xxx
To Legacies		xxx	By Office expenses		xxx
To Endowment fund		xxx	By Gardening expenses		xxx
To Sale of fixed assets		xxx	By Sundry expenses		xxx
To Sale of investments		xxx			
To Receipt for specific purpose or fund		xxx	<b>Capital Payments:</b>		
To Interest on specific fund investments		xxx	By Fixed assets		xxx
To Balance c/d (Bank overdraft)		xxx	By Investments		xxx
			By Repayment of loan		xxx
			By Balance c/d		
			Cash in hand	xxx	
			Cash at bank	xxx	xxx
		xxx			xxx



### Student activity 2.3

Recall the distinction between capital and revenue items.

### Illustration 1

From the following particulars of Tamil Educational Society, prepare Receipts and Payments account for the year ended 31<sup>st</sup> March, 2019.

Particulars	₹	Particulars	₹
Opening cash balance as on 1.4.2018	18,000	Building purchased	2,10,000
Rent paid	6,000	Staff salary	55,000
Scholarship given	15,200	Subscription received	2,65,000
Entrance fees received	18,500		

### Solution

#### In the books of Tamil Educational Society

Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2019 Cr.

Receipts	₹	Payments	₹
To Balance b/d		By Rent paid	6,000
Cash in hand	18,000	By Scholarship given	15,200
To Entrance fees	18,500	By Building purchased	2,10,000
To Subscription received	2,65,000	By Staff salary	55,000
		By Balance c/d	
		Cash in hand	<b>15,300</b>
	<b>3,01,500</b>		<b>3,01,500</b>

### Illustration 2

From the following particulars of Trichy Educational Society, prepare Receipts and Payments account for the year ended 31<sup>st</sup> December, 2018.

Particulars	₹	Particulars	₹
Opening cash balance as on 1.1.2018	20,000	Locker rent received	12,000
Investments made	80,000	Sale of furniture	5,000
Honorarium paid	3,000	General expenses	7,000
Donation received	80,000	Postage	1,000
Audit fees paid	2,000	Subscription received	10,000

### Solution

#### In the books of Trichy Educational Society

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> December, 2018 Cr.**

Receipts	₹	Payments	₹
To Balance b/d		By Investments made	80,000
Cash in hand	20,000	By Honorarium paid	3,000
To Donation received	80,000	By Audit fees	2,000
To Locker rent received	12,000	By General expenses	7,000
To Sale of furniture	5,000	By Postage	1,000
To Subscription	10,000	By Balance c/d	
		Cash in hand	<b>34,000</b>
	<b>1,27,000</b>		<b>1,27,000</b>

### Illustration 3

From the following particulars of Chennai Sports Club, prepare Receipts and Payments account for the year ended 31<sup>st</sup> March, 2018.

Particulars	₹	Particulars	₹	₹
Opening cash balance as on 1.4.2017	10,000	Subscriptions received		
Opening bank balance as on 1.4.2017	15,000	2016 – 2017	4,500	
Interest paid	5,000	2017 – 2018	65,000	
Telephone expenses	7,000	2018 – 2019	5,000	74,500
Upkeep of grounds	22,500	Tournament expenses		12,500
Life membership fees received	5,500	Tournament fund receipts		15,000
Bats and balls purchased	13,000	Closing balance of cash		5,000
		(31.3.2018)		

### Solution

#### In the books of Chennai Sports Club

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2018 Cr.**

Receipts	₹	₹	Payments	₹	₹
To Balance b/d:			By Interest paid		5,000
Cash	10,000		By Telephone expenses		7,000
Bank	15,000	25,000	By Upkeep of grounds		22,500
To Life membership fees		5,500	By Bats and balls purchased		13,000
To Tournament fund receipts		15,000	By Tournament expenses		12,500
To Subscriptions received			By Balance c/d		
2016 – 2017	4,500		Cash	5,000	
2017 – 2018	65,000		Bank (Bal. fig)	<b>55,000</b>	60,000
2018 – 2019	5,000	74,500			
		<b>1,20,000</b>			<b>1,20,000</b>

### Illustration 4

From the following particulars of Poompuhar Literary Association, prepare Receipts and Payments account for the year ended 31<sup>st</sup> March, 2019.

Particulars	₹	Particulars	₹
Opening cash in hand as on 1.4.2018	5,000	Subscriptions received	20,000
Bank overdraft as on 1.4.2018	4,000	Repairs and renewals	2,500
Printing and stationery	1,500	Conveyance paid	2,750
Interest paid	3,250	Books purchased	10,000
Sale of investments	1,000	Insurance premium paid	4,000
Purchase of refreshments	1,500	Sundry receipts	750
Outstanding salary	2,000	Government grants received	6,000
Endowment fund receipts	2,000	Sale of refreshments	1,500
Lighting charges	1,300	Depreciation on buildings	2,000
		Cash at bank on 31.03.2019	2,000

### Solution

#### In the books of Poompuhar Literary Association

Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2019 Cr.

Receipts	₹	Payments	₹
To Balance b/d		By Balance b/d	
Cash in hand	5,000	Bank overdraft	4,000
To Sale of investments	1,000	By Printing and stationery	1,500
To Endowment fund receipts	2,000	By Interest paid	3,250
To Subscriptions received	20,000	By Purchase of refreshments	1,500
To Sundry receipts	750	By Lighting charges	1,300
To Government grants received	6,000	By Repairs and renewals	2,500
To Sale of refreshments	1,500	By Conveyance paid	2,750
		By Books purchased	10,000
		By Insurance premium paid	4,000
		By Balance c/d	
		Cash at bank	2,000
		Cash in hand	3,450
	36,250		36,250

Note: As outstanding salary and depreciation are non-cash items, both are to be excluded in receipts and payments account.

### Illustration 5

From the following particulars of Vellore Recreation Club, prepare Receipts and Payments account for the year ended 31<sup>st</sup> March, 2017.

Particulars	₹	Particulars	₹
Opening cash balance as on 1.4.2016	3,000	Receipts from entertainment	20,000
Opening bank balance as on 1.4.2016	12,000	Admission fees received	1,000
Furniture purchased	11,000	Municipal taxes	22,000
Sports equipment purchased	11,000	Expenses of charity show	2,000
Donation received for pavilion	8,000	Billiards table purchased	15,000
Sale of old tennis balls	1,500	Construction of new tennis court	18,000
Newspapers bought	500	Receipts from charity show	2,500
Travelling expenses	4,500	Closing balance of cash in hand	8,000

### Solution

#### In the books of Vellore Recreation Club

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2017** **Cr.**

Receipts	₹	₹	Payments	₹
To Balance b/d			By Furniture purchased	11,000
Cash in hand	3,000		By Sports equipment	
Cash at bank	12,000	15,000	purchased	11,000
To Donation received for pavilion		8,000	By Newspapers bought	500
To Sale of old tennis balls		1,500	By Travelling expenses	4,500
To Receipts from entertainment		20,000	By Municipal taxes	22,000
To Admission fees		1,000	By Expenses of charity show	2,000
To Receipts from charity show		2,500	By Billiards table purchased	15,000
To Balance c/d		<b>44,000</b>	By Construction of new	
(Bank overdraft)			tennis court	18,000
			By Balance c/d	
			Cash in hand	8,000
		<b>92,000</b>		<b>92,000</b>

### 2.4 Items peculiar to not-for-profit organisations

Distinction between revenue and capital items will be helpful while preparing the final accounts of not-for-profit organisations. Revenue items will be recorded in income and expenditure account while capital items will be recorded in the balance sheet. Items peculiar to not-for-profit organisations and their accounting treatment in that context is given below:



### **(i) Subscription**

Not-for-profit organisations usually collect subscriptions periodically from their members. These may be collected monthly, quarterly, half-yearly or yearly. In addition, some special subscriptions, for example, subscription for tennis, billiards, etc., are collected from the concerned members playing tennis or billiards as the case may be. All these subscriptions are revenue receipts.

### **(ii) Interest on investment**

For investments made, the organisation may receive interest. It is a revenue receipt.

### **(iii) Sale of old sports materials**

The sale proceeds of old sports materials like balls, bats, etc. are revenue receipts.

### **(iv) Sale of old newspapers**

The sale proceeds of old newspapers are revenue receipts.

### **(v) Life membership fee**

Amount received towards life membership fee from members is a capital receipt as it is non-recurring in nature.

### **(vi) Legacy**

A gift made to a not-for-profit organisation by a will, is called legacy. It is a capital receipt.

### **(vii) Admission fee or Entrance fee**

It is a fee collected from every member only once at the time of his or her admission into the organisation. It may be treated as a revenue receipt as it is a recurring income from new members admitted every year and may be used to meet the expenses at the time of admission. It may also be treated as a capital receipt.

### **(viii) Grants from government and other organisations**

Not-for-profit organisations may receive different forms of grant from government and other organisations.

Grants received towards construction of buildings, acquisition of assets, etc., are treated as capital receipts as they are non-recurring in nature.

Grants received towards maintenance of assets, payment of salaries, etc., are treated as revenue receipts as they are recurring in nature.

### **(ix) Donations**

These are the amounts received by not-for-profit organisations as a gift. It may be general donation or specific donation.

General donation: If the donation is received without any specific condition, then it is a general donation. It is a revenue receipt.

Specific donation: If the donation is received with a specific condition for a particular purpose like donations for sports fund, prize fund etc., it is known as specific donation. It is a capital receipt.

**(x) Honorarium**

It is the remuneration paid to a person who is not a regular employee of the organisation. It is a revenue expenditure.

**(xi) Purchase of sports materials**

Sports materials such as balls, bats, nets, etc. are consumable items. Amount of consumed sports materials are taken as revenue expenditure and value of unconsumed sports materials (stock) are shown as asset in the balance sheet.

**(xii) Purchase of sports equipment**

It is a capital expenditure. Examples: Purchase of Table tennis table, Billiards table, etc.

**(xiii) Purchase of books for library**

Books purchased for library is a capital expenditure.

Few examples of capital and revenue items peculiar to not-for-profit organisations are given below:

Revenue receipts	Capital receipts	Revenue or capital receipt (as per the practice of the organisation)
Subscription	Life membership fees	Admission fee or Entrance fee
Interest on investment	Legacies	Donations
Interest on fixed deposit	Specific donations	Special fees
Sale of (old) sports materials	Sale of fixed assets	Grants from government and other organisations
Sale of (old) newspapers	Special funds	
Collection or receipts relating to	Tournament fund	
a) Tournament	Prize fund	
b) Sports		
c) Matches		
d) Entertainments		
e) Dinner		

**Note:** In this unit, entrance fees or admission fees, donations, special fees and grants from government and other organisations have been treated as revenue receipts even though these may also be treated as capital receipts.





Capital expenditure	Revenue expenditure
Purchase of sports equipment	Honorarium
Purchase of books for library	Charity
	Audit fees
	Purchase of sports materials
	Printing and stationery
	Postage and courier charges
	Expenses relating to
	a) Tournament, b) Sports, c) Matches, d) Entertainments, e) Dinner

## 2.5 Income and Expenditure Account

Income and expenditure account is a summary of income and expenditure of a not-for-profit organisation prepared at the end of an accounting year. It is prepared to find out the surplus or deficit pertaining to a particular year.

It is a nominal account in nature in which items of revenue receipts and revenue expenditure, relating to the current year alone are recorded. It is prepared following the accrual basis of accounting.

It is just like preparing a profit and loss account. In this account, incomes are shown on the credit side and expenses are shown on the debit side. Apart from cash items, non-cash items such as income accrued but not received, loss or gain on sale of fixed assets, depreciation, etc. will also be recorded.

It helps to enable the members to know the working of the organisation and to know whether its income is sufficient to meet its expenses. It can be prepared from a given receipts and payments account.

### 2.5.1 Steps in preparation of income and expenditure account from receipts and payments account

Following are the steps to be followed in preparing income and expenditure account from receipts and payments account:

- (i) Opening and closing balances of cash and bank accounts in receipts and payments account must be excluded.
- (ii) Capital receipts and capital expenditures must be excluded.
- (iii) Only revenue receipts pertaining to the current year should be taken to the credit side of income and expenditure account. Due adjustments should be made for income received in advance, income accrued for the current year and for the amount relating to the previous year or years.
- (iv) Similarly, revenue expenditure relating to the current year only must be taken in the debit side of income and expenditure account. Adjustments must be made for outstanding expenses of the previous year and current year and for the prepaid expenses of the previous year and current year.



- (v) Any income or expense relating to specific fund must not be taken to income and expenditure account.
- (vi) Non-cash items such as bad debts, depreciation, loss or gain on sale of assets, etc., which are not recorded in receipts and payments account must be recorded in income and expenditure account.
- (vii) The balancing figure of income and expenditure account is either surplus or deficit and will be transferred to capital fund in the balance sheet. If the total of credit side of income and expenditure account is more than the total of debit side (excess of income over expenditure), the difference represents surplus. If the total of debit side of income and expenditure account is more than the total of credit side (excess of expenditure over income), the difference represents deficit.

### 2.5.2 Format of Income and Expenditure Account

Name of the club / Institution

**Dr.** **Income and Expenditure Account for the year ended ....** **Cr.**

Expenditure	₹	Income	₹
To Salaries	xxx	By Subscription	xxx
To Charities	xxx	By Donation received	xxx
To Rent	xxx	By Admission fee received	xxx
To Donation paid	xxx	By Grant received	xxx
To Stationery	xxx	By Rent received	xxx
To Loss on sale of asset	xxx	By Interest received	xxx
To Depreciation	xxx	By Profit on sale of asset	xxx
To Surplus*	xxx	By Deficit*	xxx
(Excess of income over expenditure)		(Excess of expenditure over income)	
	xxx		xxx

\* Note: The balancing figure may be either surplus or deficit.



#### Student activity 2.4

List down any five expenses relevant for a music club.

### Illustration 6

From the following Receipts and Payment Account of Ooty Recreation Club, prepare Income and Expenditure Account for the year ended 31.03.2018.

Receipts	₹	Payments	₹
To Opening balance		By Sports materials purchased	10,000
Cash in hand	5,000	By Stationery paid	7,000
To Rent received	10,000	By Computer purchased	25,000
To Sale of investments	8,000	By Salaries	20,000
To Subscription received	54,000	By Closing balance	
		Cash in hand	15,000
	77,000		77,000

### Solution

#### In the books of Ooty Recreation Club

**Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2018** **Cr.**

Expenditure	₹	Income	₹
To Sports materials purchased	10,000	By Rent received	10,000
To Stationery paid	7,000	By Subscription received	54,000
To Salaries	20,000		
To Surplus	<b>27,000</b>		
(Excess of income over expenditure)			
	64,000		64,000

### Illustration 7

From the following Receipts and Payment Account of Trichy Recreation Club, prepare Income and Expenditure Account for the year ended 31.03.2018.

Receipts	₹	Payments	₹
To Opening balance		By Furniture purchased	10,000
Cash in hand	11,000	By Rent	2,800
To Dividend received	27,600	By Secretary's honorarium	15,000
To Sale of old newspaper	3,000	By Postage	1,700
To Members' subscription	31,000	By General expenses	4,350
To Locker rent	8,000	By Printing and Stationery	45,000
To Interest on investments	1,250	By Audit fees	5,000
To Sale of furniture	5,000	By Closing balance	
(Book value ₹ 4,400)		Cash in hand	3,000
	86,850		86,850

## Solution

### In the books of Trichy Recreation Club

Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2018 Cr.

Expenditure	₹	Income	₹
To Rent	2,800	By Dividend received	27,600
To Secretary's honorarium	15,000	By Sale of old newspaper	3,000
To Postage	1,700	By Members' subscription	31,000
To General expenses	4,350	By Locker rent	8,000
To Printing and stationery	45,000	By Interest on Investments	1,250
To Audit fees	5,000	By Profit on sale of furniture (5,000 - 4,400)	600
		By Deficit	<b>2,400</b>
		(Excess of expenditure over income)	
	73,850		73,850

### 2.5.3 Differences between receipts and payments account and income and expenditure account

Basis	Receipts and Payments Account	Income and Expenditure Account
1. Purpose	It is prepared to know the cash receipts and cash payments.	It is prepared to know whether there is an excess of income over expenditure (surplus) or an excess of expenditure over income (deficit) during the current period.
2. Nature of account	It is a real account. It is a summary of cash account. Cash receipts are recorded on the debit side and cash payments are recorded on the credit side.	It is a nominal account. It is similar to profit and loss account. Expenses are recorded on the debit side and incomes are recorded on the credit side.
3. Basis of accounting	It is based on cash system of accounting. Non-cash items are not recorded.	It is based on accrual system of accounting. Non-cash items like outstanding expenses, depreciation, etc. are also recorded.
4. Opening and closing balance	It commences with an opening balance of cash and bank and ends with closing balance of cash and bank.	There is no opening balance. It ends with surplus or deficit.
5. Nature of items	It contains actual receipts and payments irrespective of revenue or capital items in nature.	It contains only revenue items, that is, only revenue expenses and revenue incomes.
6. Period	All cash receipts and payments made during the year pertaining to the past period, current period and subsequent period are recorded.	It contains only the items relating to the current period.

## 2.5.4 Treatment of revenue receipts

### (a) Treatment of subscription in the final accounts of not-for-profit organisation

#### (A) Treatment in Income and Expenditure Account

When subscription received for the current year, previous years and subsequent period are given separately, subscription received for the current year will be shown on the credit side of Income and Expenditure Account after making the adjustments given below:

- (i) Subscription outstanding for the current year is to be added.
- (ii) Subscription received in advance in the previous year which is meant for the current year, is to be added.

When total subscription received during the current year is given, that total subscriptions received during the current year will be shown on the credit side of Income and Expenditure Account after making the following adjustments:

- (i) Subscription outstanding in the previous year which is received in the current year will be subtracted. Subscription outstanding for the current year is added.
- (ii) Subscriptions received in advance in the previous year which is meant for the current year, is added and subscriptions received in advance in the current year which is meant for the subsequent year must be subtracted.

#### (B) Treatment in Balance Sheet

- (i) Subscriptions outstanding for the current year and still outstanding for the previous year will be shown on the assets side of the balance sheet.
- (ii) Subscriptions received in advance in the current year will be shown on the liabilities side of the balance sheet.

**Dr.** **Income and Expenditure Account for the year ended...** **Cr.**

Expenditure	₹	Income	₹	₹
		By Subscription	XXX	
		Less: Subscription for the previous year	XXX	
			XXX	
		Less: Subscription for the subsequent year	XXX	
			XXX	
		Add: Outstanding subscription for the current year	XXX	
			XXX	
		Add: Received in advance during the previous year for the current year	XXX	XXX
			XXX	

### Balance sheet as on ...

Liabilities	₹	Assets	₹
Subscription received in advance for the subsequent year	xxx	Outstanding subscription for the: current year previous year	xxx xxx

### Illustration 8

From the following details calculate the amount that will be shown as subscription in Income and Expenditure Account for the year ending 31<sup>st</sup> March, 2017.

Subscription received for	₹
2015-16	7,500
2016-17	60,000
2017-18	1,500
	69,000

Subscription outstanding for the year 2016-17 is ₹ 2,400. Subscription for 2016-17 received in 2015-16 was ₹ 1,000.

### Solution

**Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2017** **Cr.**

Expenditure	₹	Income	₹	₹
		By Subscription	60,000	
		Add: Outstanding subscription for 2016-17	2,400	
		Subscription received in advance in 2015-16 for 2016-17	1,000	63,400

### Tutorial note

- (i) Subscription for the year 2015-16 ₹ 7,500 and for the year 2017-18 ₹ 1,500 do not relate to the current year. So they should not be recorded in Income and Expenditure Account.
- (ii) Subscription outstanding for the current year 2016-17 is ₹ 2,400. It should be added with the amount of subscription received during 2016-17.

### Illustration 9

How the following items will appear in the final accounts of a club for the year ending 31<sup>st</sup> March, 2019?

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2019 Cr.**

Receipts	₹	₹	Payments	₹
To Subscription				
2017-2018	5,000			
2018-2019	48,000			
2019-2020	3,000	56,000		

There are 300 members in the club each paying an annual subscription of ₹ 200 per annum. Subscription still outstanding for the year 2017- 2018 is ₹ 1,000.

**Solution:**

**Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March 2019 Cr.**

Expenditure	₹	Income	₹	₹
		By Subscription	48,000	
		Add: Outstanding subscription for 2018-2019	12,000	60,000

**Balance sheet as on 31<sup>st</sup> March, 2019**

Liabilities	₹	Assets	₹	₹
Subscription received in advance for the year 2019-20	3,000	Outstanding subscription		
		2017 – 2018	1,000	
		2018 – 2019	12,000	13,000

**Tutorial note**

Total Subscription due for current the year (2018-19)	300 x ₹ 200	= ₹ 60,000
Less: Amount received for the current year (2018-19)		= ₹ 48,000
Outstanding subscription for the current year (2018-2019)		= ₹ 12,000

**Illustration 10**

How will the following items appear in the final accounts of a club for the year ending 31<sup>st</sup> March 2017? A club received subscription of ₹ 25,000 during the year 2016-17. This includes subscription of ₹ 2,000 for 2015-16 and ₹ 1,500 for the year 2017-18. Subscription of ₹ 500 is still outstanding for the year 2016-17.

### Solution

#### Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2017 Cr.

Expenditure	₹	Income	₹	₹
		By Subscription	25,000	
		Less: Subscription for the year 2015-16	2,000	
			23,000	
		Less: Subscription for the year 2017-18	1,500	
			21,500	
		Add: Outstanding subscription for the year 2016-17	500	22,000

#### Balance sheet as on 31<sup>st</sup> March, 2017

Liabilities	₹	Assets	₹
Subscription received in advance for the year 2017-18	1,500	Outstanding subscription for the year 2016-2017	500

### Illustration 11

Compute income from subscription for the year 2018 from the following particulars relating to a club.

Particulars	1.1.2018 ₹	31.12.2018 ₹
Outstanding subscription	10,000	7,000
Subscription received in advance	3,000	5,000

Subscription received during the year 2018: ₹ 1,50,000.

### Solution

Calculation of income from subscription for the year 2018

Particulars	₹	₹
Subscription received during the year 2018		1,50,000
Add: Subscription received for 2018 in 2017	3,000	
Subscription outstanding for 2018	7,000	10,000
		1,60,000
Less: Subscription outstanding in 2017	10,000	
Subscription received in advance in 2018	5,000	15,000
Income from subscription for the year 2018		1,45,000



### Illustration 12

From the following particulars, show how the item 'subscription' will appear in the Income and Expenditure Account for the year ended 31-12-2018?

Subscription received in 2018 is ₹ 16,000 which includes ₹ 3,000 for 2017 and ₹ 5,000 for 2019. Subscription outstanding for the year 2018 is ₹ 4,000. Subscription of ₹ 2,000 was received in advance for 2018 in the year 2017.

### Solution

**Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> December, 2018 Cr.**

Expenditure	₹	Income	₹	₹
		By Subscription received during the year	16,000	
		Less: Subscription received for 2017	3,000	
			13,000	
		Less: Subscription received for 2019	5,000	
			8,000	
		Add: Subscription due for 2018	4,000	
			12,000	
		Add: Received in advance in 2017 for 2018	2,000	<b>14,000</b>

### (b) Treatment of consumable items such as sports materials, stationery items, medicines, etc.

- Consumable items such as sports materials, stationery, medicines, etc., consumed during the year will appear on the debit side of income and expenditure account.
- Consumption = Opening stock + Purchases during the current year - Closing stock
- Closing stock will appear on the assets side of the balance sheet as at the end of the year.
- If there is any sale of old sports materials, etc., that will be shown on the credit side of income and expenditure account or can be subtracted from the respective items consumed on the debit side of income and expenditure account.

### Illustration 13

How will the following items appear in the final accounts of a sports club?

Particulars	₹
Stock of sports materials (01.04.2018)	3,000
Sports materials purchased during current year	9,000
Sale of old sport materials during current year	500
Stock of sports materials (31.03.2019)	4,000

**Solution****Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2019 Cr.**

Expenditure	₹	₹	Income	₹
To Sports materials consumed:			By Sale of old sports materials	500
Opening stock	3,000			
Add: Purchased in the current year	9,000			
	12,000			
Less: Closing stock	4,000	8,000		

**Balance sheet as on 31<sup>st</sup> March, 2019**

Liabilities	₹	₹	Assets	₹	₹
			Stock of sports materials		4,000

**Illustration 14**

From the following details calculate the printing and stationery to be debited to Income and Expenditure Account for the year ending 31<sup>st</sup> March, 2018 and also show how it will appear in the Balance Sheet as on 31<sup>st</sup> March, 2018.

Amount paid for stationery during 2017- 2018	₹ 1,500
Stock of stationery on 1 <sup>st</sup> April, 2017	₹ 300
Stock of stationery on 31 <sup>st</sup> March, 2018	₹ 200

**Solution:****Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2018 Cr.**

Expenditure	₹	₹	Income	₹	₹
To Stationery consumed:					
Opening stock	300				
Add: Purchases	1,500				
	1,800				
Less: Closing stock	200	1,600			

**Balance sheet as on 31<sup>st</sup> March, 2018**

Liabilities	₹	Assets	₹
		Stock of stationery	200

### (c) Treatment of incomes and expenses pertaining to specific funds

- (i) Specific fund is to be shown on the liabilities side and specific fund investments account is to be shown on the assets side of the balance sheet.
- (ii) Incomes and expenses relating to the specific fund account should not be recorded in income and expenditure account.
- (iii) Incomes relating to the fund should be added to the fund account and expenses relating to the fund should be subtracted from the fund account in the balance sheet prepared as at the end of the year.
- (iv) If interest is accrued on specific fund investments for the current year, then it should be added along with the fund account on the liabilities side and should also be shown on the assets side of the balance sheet as accrued interest on investments.

### Illustration 15

How will the following appear in the final accounts of a club for the year 2017 –2018?

Particulars	₹
Prize fund on 1.4.2017	60,000
Prize fund investment on 1.4.2017	60,000
Interest received on prize fund investment	6,000
Prizes distributed	8,000
Donation received for prize fund	12,000

### Solution

#### Balance sheet as on 31<sup>st</sup> March, 2018

Liabilities	₹	₹	Assets	₹	₹
Prize fund	60,000		Prize fund		
Add: Interest received on prize fund investment	6,000		investment		60,000
Add: Donation for prize fund	12,000				
	78,000				
Less: Prizes distributed	8,000	70,000			

## 2.6 Balance Sheet

A Balance sheet is a statement showing the financial position of an organisation. The preparation of balance sheet of a not-for-profit organisation is more or less similar to that of a trading concern. Assets and liabilities, as on the last date of the accounting period are taken to the balance sheet (liabilities are taken on the left side and assets on the right side of the balance sheet).

### Important points in the preparation of a balance sheet of a not-for-profit organisation

- (a) Capital fund also called as general fund or accumulated fund is taken to the liabilities side. Surplus in the income and expenditure account is added to the capital fund and deficit is subtracted from the capital fund in the balance sheet.

#### Tutorial Note

If capital fund of the organisation is not given in the problem, the opening balance sheet should be prepared to ascertain the opening capital fund. The difference between the total of assets and the total of liabilities as at the beginning of the year is the opening capital fund.

$$\text{Opening capital fund} = \text{Assets at the beginning} - \text{Liabilities at the beginning}$$

#### Illustration 16

Compute capital fund of Karur Social Club as on 31.03.2018.

Particulars as on 31.03.2018	₹
Furniture	50,000
Buildings	40,000
Subscription outstanding for 2017-18	10,000
Subscription received in advance for 2018-19	5,000
Loan borrowed	10,000
Investments	20,000
Cash in hand	4,000
Cash at bank	6,000

#### Solution

#### Balance sheet as on 31<sup>st</sup> March, 2018

Liabilities	₹	Assets	₹
Capital fund	1,15,000	Buildings	40,000
(Balancing figure)		Furniture	50,000
Loan borrowed	10,000	Investments	20,000
Subscription received in advance	5,000	Subscription outstanding	10,000
		Cash at bank	6,000
		Cash in hand	4,000
	1,30,000		1,30,000

- (b) While preparing the balance sheet as at the end of the accounting year, the closing balances of cash and bank should be taken to the assets side of the balance sheet. If there is bank overdraft, that should be taken to the liabilities side of the balance sheet.

- (c) Assets appearing in the previous year's balance sheet, that is, in the opening balance sheet, should be taken on the assets side of the current year balance sheet and adjustments must be made for any change taking place during the year. While taking such assets, additional assets purchased should be added and assets sold should be subtracted. Depreciation on such assets should also be adjusted.

**Tutorial note:** New assets purchased or assets sold are to be found out by referring to the receipts and payments account.

- (d) Prepaid expenses and accrued incomes as at the end of the current year should be taken to the assets side of the balance sheet.
- (e) Outstanding expenses at the end of the current year and any income received in advance during the current year should be taken to the liabilities side of the balance sheet.
- (f) If there are any specific funds such as tournament fund, prize fund, etc., these funds should be shown on the liabilities side of the balance sheet separately. Any income to the fund should be added to the fund account and expenses relating to the fund should be subtracted from the fund account in the balance sheet.
- (g) If there is any specific fund investment, that should be taken to the assets side of the balance sheet.



A trial balance can also be prepared for a not-for-profit organisation by taking various ledger balances available. The total of debit balances will be equal to the total of credit balances. Expenses, losses and assets will have debit balances. Revenues, gains and liabilities will have credit balances.

## Comprehensive problems

### Illustration 17

From the following Receipts and Payments Account of Friends Football club, for the year ending 31<sup>st</sup> March, 2017, prepare Income and Expenditure Account for the year ending 31<sup>st</sup> March, 2017 and the Balance sheet as on that date.

#### In the books of Friends Football Club

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2017 Cr.**

Receipts	₹	₹	Payments	₹	₹
To Balance b/d			By Furniture		7,000
Cash	1,000		By Sports materials purchased		800
Bank	10,000	11,000	By Special dinner expenses		1,500
To Subscriptions		5,000	By Electricity charges		900
To Legacies		6,000	By Balance c/d		
To Collection for special dinner		2,000	Cash in hand	1,800	
			Cash at bank	12,000	13,800
		24,000			24,000

Additional information:

- (i) The club had furniture of ₹ 12,000 on 1<sup>st</sup> April 2016. Ignore depreciation on furniture.
- (ii) Subscription outstanding for 2016-2017 ₹ 600.
- (iii) Stock of sports materials on 31.03.2017 ₹ 100.
- (iv) Capital fund as on 1<sup>st</sup> April 2016 was ₹ 23,000.

### Solution

#### In the books of Friends Football Club Income and Expenditure Account

Dr. Cr.  
for the year ended 31<sup>st</sup> March, 2017

Expenditure	₹	₹	Income	₹	₹
To Sports materials consumed			By Subscription	5,000	
Purchases	800		Add: Outstanding for 2016-17	600	5,600
Less: Closing stock	100	700	By Collection for special dinner		2,000
To Special dinner expenses		1,500			
To Electricity charges		900			
To Excess of income over expenditure (surplus)		<b>4,500</b>			
		<b>7,600</b>			<b>7,600</b>

#### Balance sheet as on 31<sup>st</sup> March, 2017

Liabilities	₹	₹	Assets	₹	₹
Capital fund	23,000		Furniture	12,000	
Add: Excess of income over expenditure (surplus)	4,500	27,500	Add: Additions	7,000	19,000
Legacies		6,000	Stock of sports materials		100
			Subscription outstanding for 2016-17		600
			Cash at bank		12,000
			Cash in hand		1,800
		<b>33,500</b>			<b>33,500</b>

### Illustration 18

Following is the Receipts and Payments Account of Salem Recreation Club for the year ended 31<sup>st</sup> March, 2019.

**In the books of Salem Recreation Club**

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2019 Cr.**

Receipts	₹	₹	Payments	₹
To Balance b/d:			By Furniture	15,000
Cash in hand		9,000	By Stationery	2,400
To Subscriptions			By Investment	12,500
2018 – 2019	12,500		By Postage	1,000
2019 – 2020	400	12,900	By Balance c/d:	
To Proceeds from entertainment		12,000	Cash in hand	3,500
To Sundry receipts		500		
		34,400		34,400

Additional information:

- (i) There are 450 members each paying annual subscription of ₹ 30.
- (ii) Stock of stationery on 31<sup>st</sup> March, 2018 ₹ 300 and on March 31, 2019 ₹ 500.
- (iii) Capital fund as on 1<sup>st</sup> April 2018 was ₹ 9,300.

Prepare income and expenditure account for the year ended 31<sup>st</sup> March, 2019 and the balance sheet as on that date.

**Solution**

Calculation of subscription to be received for the year 2018-19:

Subscription for the current year (450 × ₹ 30)		₹
		13,500
Subscription received for the current year		12,500
Subscription outstanding for the current year (₹13,500 – ₹12,500)		1,000

**In the books of Salem Recreation Club**

**Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2019 Cr.**

Expenditure	₹	₹	Income	₹	₹
To Stationery	2,400		By Subscription	12,500	
Add: Opening stock	300		Add: Outstanding for		
	2,700		2018-19	1,000	
Less: Closing stock	500	2,200	(450 × ₹ 30)		13,500
To Postage		1,000	By Proceeds from		
To Excess of income			entertainment		12,000
over expenditure (surplus)		22,800	By Sundry receipts		500
		26,000			26,000

**Balance sheet as on 31<sup>st</sup> March, 2019**

Liabilities	₹	₹	Assets	₹
Capital fund	9,300		Furniture	15,000
Add: Excess of income over expenditure (surplus)	22,800	32,100	Investment	12,500
Subscription received in advance		400	Subscription in arrears for 2018-19	1,000
			Stock of stationery	500
			Cash in hand	3,500
		32,500		32,500

**Illustration 19**

From the following Receipts and Payments account of Coimbatore Cricket Club for the year ending 31<sup>st</sup> March 2016, prepare income and expenditure account for the year ending 31<sup>st</sup> March, 2016 and a balance sheet as on that date.

**In the books of Coimbatore Cricket Club**

**Receipts and Payments Account for the year ending 31<sup>st</sup> March, 2016**

Receipts	₹	Payments	₹
To Balance b/d:		By Maintenance	5,000
Cash at bank	8,000	By Furniture	15,000
To Subscriptions	11,000	By Tournament expenses	1,400
To Sale of old bats and balls	100	By Secretary's honorarium	4,500
To Subscription for tournament	2,000	By Bats and balls	7,400
To Legacies	20,000	By Balance c/d:	
		Cash at bank	7,800
	41,100		41,100

Additional information:

On 1<sup>st</sup> April, 2015 the club had stock of balls and bats ₹ 3,000 and an advance subscription of ₹ 500. Surplus on account of tournament should be kept in reserve for permanent pavilion. Subscription due on 31.03.2016 was ₹ 2,000. Stock of bats and balls on 31.3.2016 was ₹ 1,000.



**Solution****Tutorial note**

To find the opening capital fund, opening balance sheet should be prepared.

**In the books of Coimbatore Cricket Club****Balance sheet as on 31<sup>st</sup> March, 2015**

Liabilities	₹	Assets	₹
Capital fund	10,500	Stock of balls and bats	3,000
(Balancing figure)		Cash at bank	8,000
Subscription received in advance	500		
	11,000		11,000

**Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2016 Cr.**

Expenditure	₹	₹	Income	₹	₹
To Maintenance		5,000	By Subscriptions	11,000	
To Secretary's honorarium		4,500	Add: Received in advance		
To Bats and balls	7,400		in 2014-15 for 2015-16	500	
Add: Opening stock	3,000			11,500	
	10,400		Add: Outstanding for 2015-16	2,000	13,500
Less: Closing stock	1,000	9,400	By Sale of old bats and balls		100
			By Excess of expenditure		
			over income (deficit)		5,300
		18,900			18,900

**Balance sheet as on 31<sup>st</sup> March, 2016**

Liabilities	₹	₹	Assets	₹
Capital fund	10,500		Furniture	15,000
Less : Excess of expenditure			Stock of balls and bats	1,000
over income (deficit)	5,300	5,200	Subscriptions outstanding	2,000
Reserve for Pavilion Fund :			Cash at bank	7,800
Subscriptions for tournament	2,000			
Less: Tournament Expenses	1,400	600		
Legacies		20,000		
		25,800		25,800

## Illustration 20

The following is the summary of cash transactions of Delhi Literary Club for the year ending 31<sup>st</sup> March, 2019.

### Delhi Literary Club Receipts and Payments Account for the year ending 31<sup>st</sup> March, 2019

Receipts	₹	Payments	₹
To Balance b/d		By Rents and Rates	21,000
Cash in hand	3,200	By Lecture fees	4,500
To Entrance fees	2,300	By Sundry expenses	7,200
To Subscriptions	46,000	By Fixed deposit	40,000
To Life membership fees	2,500	By Balance c/d	
To Interest received on fixed deposit	500	Cash in hand	4,300
To Sale of furniture (on 1.4.2018) (Book value ₹ 25,000)	22,500		
	77,000		77,000

Additional information

- At the beginning of the year the club possessed books worth ₹ 20,000 and furniture worth ₹ 40,000.
- Subscription received in advance during the current year amounted to ₹ 1,000.

Prepare Income and Expenditure account of the club for the year ending 31<sup>st</sup> March, 2019 and the Balance sheet as on that date.

### Solution

#### Tutorial note

To find the opening capital fund, opening balance sheet should be prepared.

### In the books of Delhi Literary Club Balance sheet as on 31<sup>st</sup> March, 2018

Liabilities	₹	Assets	₹
Capital fund	63,200	Furniture	40,000
(Balancing figure)		Books	20,000
		Cash in hand	3,200
	63,200		63,200

**Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2019 Cr.**

Expenditure	₹	Income	₹	₹
To Rent and rates	21,000	By Entrance fees		2,300
To Lecture fees	4,500	By Subscriptions	46,000	
To Sundry expenses	7,200	Less: Received in advance		
To Loss on sale of furniture (25,000-22,500)	2,500	during current year	1,000	45,000
To Excess of income over expenditure (surplus)	<b>12,600</b>	By Interest received on fixed deposit		500
	<b>47,800</b>			<b>47,800</b>

**Balance sheet as on 31<sup>st</sup> March, 2019**

Liabilities	₹	₹	Assets	₹	₹
Capital fund	63,200		Furniture	40,000	
Add: Excess of income over expenditure	12,600	75,800	Less: Book value of furniture sold	25,000	15,000
Life membership fees		2,500	Books		20,000
Subscription received in advance		1,000	Fixed deposit		40,000
			Cash in hand		4,300
		<b>79,300</b>			<b>79,300</b>

**Illustration 21**

The following is the Receipts and Payments account of Madurai City Club for the year ending 31<sup>st</sup> March, 2018.

**Madurai City Club**

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2018 Cr.**

Receipts	₹	₹	Payments	₹	₹
To Balance b/d:			By Upkeep of ground		16,500
Cash	500		By Match expenses		19,000
Bank	7,000	7,500	By Sundry expenses		11,000
To Subscription (including ₹ 4,000 for 2016-2017)		30,000	By Furniture		20,000
To Legacies		9,000	By Balance c/d:		
To Hall rent		10,000	Cash in hand	1,500	
To Receipts for match fund		22,500	Cash at bank	11,000	12,500
		<b>79,000</b>			<b>79,000</b>

Additional information:

On 1<sup>st</sup> April, 2017, the club had investment of ₹ 40,000. The club also had a credit balance of ₹ 30,000 in Match fund account. On 31<sup>st</sup> March, 2017 subscriptions in arrears were ₹ 4,000 and the subscriptions in arrears on 31<sup>st</sup> March, 2018 were ₹ 4,500. Prepare the final accounts.

### Solution

#### Tutorial note

To find the opening capital fund, opening balance sheet should be prepared.

**In the books of Madurai City Club**  
**Balance sheet of as on 31<sup>st</sup> March, 2017**

Liabilities	₹	Assets	₹
Capital fund		Investment	40,000
(Balancing figure)	21,500	Subscriptions outstanding	4,000
Match fund	30,000	Cash at bank	7,000
		Cash in hand	500
	51,500		51,500

**Dr. Income and Expenditure Account for the year ended 31<sup>st</sup> March, 2018 Cr.**

Expenditure	₹	Income	₹	₹
To Upkeep of ground	16,500	By Subscriptions	30,000	
To Sundry expenses	11,000	Less: Received for 2016-17	4,000	
To Excess of income			26,000	
over expenditure (surplus)	13,000	Add: Outstanding for the current year	4,500	30,500
		By Hall rent		10,000
	40,500			40,500

**Balance sheet as on 31<sup>st</sup> March, 2018**

Liabilities	₹	₹	Assets	₹
Capital fund	21,500		Furniture	20,000
Add: Excess of income over expenditure (surplus)	13,000	34,500	Investment	40,000
Legacies		9,000	Subscription outstanding	4,500
Match fund	30,000		Cash at bank	11,000
Add: Receipts for match fund	22,500		Cash in hand	1,500
	52,500			
Less: Match expenses	19,000	33,500		
		77,000		77,000

### Points to remember

- ❖ Not-for-profit entities exist to provide services to the members or to the society at large.
- ❖ The three principal accounting statements of a not-for-profit organisation include Receipts and Payments Account, Income and Expenditure Account and Balance Sheet.
- ❖ The Receipts and Payments Account is a summarised cash book which records all cash receipts and cash payments effected during an accounting year irrespective of the nature as to capital or revenue, irrespective of the period to which it belongs, that is, whether it relates to the previous or current year or subsequent year.
- ❖ Income and Expenditure Account is prepared to ascertain the excess of revenue income over revenue expenditure (surplus) or excess of revenue expenditure over revenue income (deficit) for a particular accounting year, which is the result of the entity's over all activities for the accounting year.
- ❖ Opening capital is found out by comparing the opening balances of assets and liabilities.
- ❖ The Balance sheet is prepared at the end of the accounting year to show the financial position on that date. It includes the capital fund or accumulated fund, special purpose funds, long term liabilities and current liabilities on the liabilities side and fixed assets and current assets on the assets side.

### Self-examination questions

#### I Multiple choice questions

Choose the correct answer

1. Receipts and payments account is a
  - (a) Nominal A/c
  - (b) Real A/c
  - (c) Personal A/c
  - (d) Representative personal account
2. Receipts and payments account records receipts and payments of
  - (a) Revenue nature only
  - (b) Capital nature only
  - (c) Both revenue and capital nature
  - (d) None of the above
3. Balance of receipts and payments account indicates the
  - (a) Loss incurred during the period
  - (b) Excess of income over expenditure of the period
  - (c) Total cash payments during the period
  - (d) Cash and bank balance as on the date
4. Income and expenditure account is a
  - (a) Nominal A/c
  - (b) Real A/c
  - (c) Personal A/c
  - (d) Representative personal account





5. Income and Expenditure Account is prepared to find out
- (a) Profit or loss (b) Cash and bank balance  
(c) Surplus or deficit (d) Financial position
6. Which of the following should not be recorded in the income and expenditure account?
- (a) Sale of old news papers (b) Loss on sale of asset  
(c) Honorarium paid to the secretary (d) Sale proceeds of furniture
7. Subscription due but not received for the current year is
- (a) An asset (b) A liability  
(c) An expense (d) An item to be ignored
8. Legacy is a
- (a) Revenue expenditure (b) Capital expenditure  
(c) Revenue receipt (d) Capital receipt
9. Donations received for a specific purpose is
- (a) Revenue receipt (b) Capital receipt  
(c) Revenue expenditure (d) Capital expenditure
10. There are 500 members in a club each paying ₹ 100 as annual subscription. Subscription due but not received for the current year is ₹ 200; Subscription received in advance is ₹ 300. Find out the amount of subscription to be shown in the income and expenditure account.
- a) ₹ 50,000      b) ₹ 50,200      c) ₹ 49,900      d) ₹ 49,800

### Answers

1. (b)	2. (c)	3. (d)	4. (a)	5. (c)	6. (d)	7. (a)	8. (d)	9. (b)	10. (a)
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### II Very short answer questions

1. State the meaning of not-for-profit organisation.
2. What is receipts and payments account?
3. What is legacy?
4. Write a short note on life membership fees.
5. Give four examples for capital receipts of not-for-profit organisation.
6. Give four examples for revenue receipts of not-for-profit organisation.

### III Short answer questions

1. What is income and expenditure account?
2. State the differences between Receipts and Payments Account and Income and Expenditure Account.
3. How annual subscription is dealt with in the final accounts of not-for-profit organisation?
4. How the following items are dealt with in the final accounts of not-for-profit organisation?  
a) Sale of sports materials      b) Life membership fees      c) Tournament fund

#### IV Exercises

1. From the information given below, prepare Receipts and Payments account of Kurunji Sports Club for the year ended 31<sup>st</sup> December, 2018.

Particulars	₹	Particulars	₹
Cash in hand (1.1.2018)	4,000	Paid for printing charges	2,500
Salaries paid	3,000	Lockers rent received	1,000
Life membership fees received	10,000	Tournament receipts	14,000
Subscription received	15,000	Tournament expenses	10,500
Rent received	2,000	Investments purchased	25,000

(Answer: Cash balance: ₹ 5,000)

2. From the information given below, prepare Receipts and Payments account of Coimbatore Cricket Club for the year ending 31<sup>st</sup> March, 2019.

Particulars	₹	₹	Particulars	₹
Bank overdraft (1.4.2018)		6,000	Honorarium paid	2,800
Cash in hand (1.4.2018)		1,000	Water and electricity charges	700
Wages paid for ground maintenance		2,000	Match expenses	2,600
Subscription received:			Sports material purchased	1,900
Previous year	500		Match fund receipts	5,200
Current year	9,600		Legacies received	2,000
Subsequent year	400	10,500	Cash balance (31.03.2019)	300
Wages yet to be paid		2,200	Donation received for pavilion	2,000
Interest on loan paid		2,000		

(Answer: Bank balance: ₹ 2,400)

(Hint: Wages yet to be paid is a non cash item. Hence, it is excluded in receipts and payments account)

3. From the information given below, prepare Receipts and Payments account of Madurai Mother Theresa Mahalir Mandram for the year ended 31<sup>st</sup> December, 2018.

Particulars	₹	Particulars	₹
Cash balance as on 1.1.2018	2,000	Fire Insurance premium paid	1,500
Bank balance as on 1.1.2018	3,000	Subscription received	8,500
Sale of old newspapers	500	Furniture purchased	6,000
Stationery purchased	6,000	Purchase of newspapers	700
Audit fees paid	2,000	Depreciation on furniture	900
Entrance fees received	3,000	Cash balance as on 31.12.2018	2,500
Sundry charges	6,000	Conveyance paid	1,000
Scholarships given	2,000	Sale of furniture	4,000
Interest on investments	2,000		

(Answer: Bank overdraft: ₹ 4,700)

(Hint: As depreciation on furniture is a non cash item, it is excluded in receipts and payments account)

4. Mayiladuthurai Recreation Club gives you the following details. Prepare Receipts and Payments account for the year ended 31<sup>st</sup> March, 2019.

Particulars	₹	Particulars	₹
Opening cash balance	15,000	Salary of watchman	12,000
Opening bank balance	25,000	Club annual day expenses	15,000
Donations received	48,000	Lighting charges	16,500
Sale of old equipment	26,000	Entertainment expenses	13,500
Refreshment charges	13,000	Billiards table purchased	5,000
Club annual day collections	18,000	Expenses of charity show	3,000
Construction of tennis court	7,000	Sale of investments	12,000
Receipts from charity show	4,000	Closing cash balance	12,000
Rent paid	1,000		

(Answer: Bank balance: ₹ 50,000)

5. From the following information, prepare Receipts and Payments account of Cuddalore Kabaddi Association for the year ended 31<sup>st</sup> March, 2019.

Particulars	₹	Particulars	₹
Opening cash balance (1.4.2018)	11,000	Interest and bank charges	250
Bank overdraft balance (1.4.2018)	20,000	Miscellaneous income	350
Stationery purchased	5,200	Upkeep of ground	550
Travelling expenses	1,800	Grant from Government	12,000
Dividend received	3,000	Telephone charges paid	2,800
General expenses	500	Endowment fund receipts	10,000
Admission fees	4,000	Insurance premium paid	2,000
Courier charges	2,000	Electricity charges paid	5,000
Municipal taxes paid	3,000	Closing cash balance (31.03.2019)	1,750

(Answer: Bank overdraft: ₹ 4,500)



6. From the following receipts and payments account of Tenkasi Thiruvalluvar Manram, prepare income and expenditure account for the year ended 31<sup>st</sup> March, 2019.

Receipts	₹	Payments	₹
To Balance b/d		By Salaries	20,000
Cash in hand	14,000	By Rent	24,000
To Interest received	5,000	By Travelling expenses	2,000
To Subscription	55,000	By Printing and stationery	6,000
To Legacies	48,000	By Investments made	50,000
To Entrance fees	7,000	By Sports equipment purchased	33,000
To Sale of furniture	16,000	By Balance c/d	
(Book value: ₹ 17,000)		Cash in hand	10,000
	1,45,000		1,45,000

(Answer: Surplus: ₹ 14,000)

7. From the following receipts and payment account, prepare income and expenditure account of Kumbakonam Basket Ball Association for the year ended 31<sup>st</sup> March, 2018.

Receipts	₹	₹	Payments	₹	₹
To Balance b/d			By Rent of ground paid		12,000
Cash in hand	23,000		By Printing charges		5,000
Cash at bank	12,000	35,000	By Bank charges		1,000
To Rent of hall received		6,000	By Insurance for building		2,000
To Subscription received		9,000	By Tournament expenses		16,000
To Life membership fees		7,000	By Audit fees		3,000
To Locker rent received		2,000	By Sports materials purchased		4,000
			By Balance c/d		
			Cash in hand	2,000	
			Cash at bank	14,000	16,000
		59,000			59,000

(Answer: Deficit: ₹ 26,000)

8. From the following receipts and payments account and the additional information given below, calculate the amount of subscription to be shown in Income and expenditure account for the year ending 31<sup>st</sup> December, 2018.

Receipts	₹	₹	Payments	₹
To Subscription				
2017	28,000			
2018	1,72,000			
2019	12,000	2,12,000		

Additional information: Subscription outstanding for the year 2018 is ₹ 8,000.

**(Answer: Subscription for 2018: ₹ 1,80,000)**

9. How the following items will appear in the final accounts of a club for the year ending 31<sup>st</sup> March 2019?

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2019 Cr.**

Receipts	₹	₹	Payments	₹
To Subscription				
2017-2018	10,000			
2018-2019	50,000			
2019-2020	5,000	65,000		

There are 200 members in the club each paying an annual subscription of ₹ 400 per annum. Subscription still outstanding for the year 2017- 2018 is ₹ 2,000.

**(Ans: Income and Expenditure A/c: Subscription: ₹ 80,000**

**Balance Sheet: Assets: Subscription outstanding: ₹ 32,000;**

**Liabilities: Subscription received in advance: ₹ 5,000)**

10. How will the following items appear in the final accounts of a club for the year ending 31<sup>st</sup> March 2017? Received subscription of ₹ 40,000 during the year 2016-17. This includes subscription of ₹ 5,000 for 2015-16 and ₹ 3,000 for the year 2017-18. Subscription of ₹ 1,000 is still outstanding for the year 2016-17.

**(Ans: Income and Expenditure A/c: Subscription: ₹ 33,000**

**Balance Sheet: Assets: Subscription outstanding: ₹ 1,000;**

**Liabilities: Subscription received in advance: ₹ 3,000)**

11. Compute income from subscription for the year 2018 from the following particulars relating to a club.

Particulars	1.1.2018 ₹	31.12.2018 ₹
Outstanding subscription	3,000	5,000
Subscription received in advance	4,000	7,000

Subscription received during the year 2018: ₹ 45,000.

**(Ans: Income and Expenditure A/c: Subscription: ₹ 44,000)**



12. From the following particulars, show how the item 'subscription' will appear in the Income and Expenditure Account for the year ended 31-12-2018?

Subscription received in 2018 is ₹ 50,000 which includes ₹ 5,000 for 2017 and ₹ 7,000 for 2019. Subscription outstanding for the year 2018 is ₹ 6,000. Subscription of ₹ 4,000 was received in advance for 2018 in the year 2017.

**(Ans: Income and Expenditure A/c: Subscription: ₹ 48,000)**

13. How the following items appear in the final accounts of Thoothukudi Young Pioneers Association?

There are one hundred members in the association each paying ₹ 25 as annual subscription. By the end of the year 10 members had not paid their subscription but four members had paid for the next year in advance.

**(Answer: Income and expenditure account: Subscription: ₹ 2,500)**

**Balance sheet: Liabilities: Subscription received in advance: ₹ 100**

**Assets: Subscription outstanding: ₹ 250)**

14. How will the following appear in the final accounts of Marthandam Women Cultural Association?

	₹
Stock of sports materials on 1.4.2018	16,000
Sports materials purchased during the year	84,000
Stock of sports materials on 31.3.2019	10,000

**(Answer: Income and expenditure account (Dr.): ₹ 90,000;**

**Balance sheet: Assets: Stock of sports materials ₹ 10,000)**

15. How will the following appear in the final accounts of Vedaranyam Sports club?

	₹
Opening stock of bats and balls	3,000
Purchase of bats and balls during the year	17,000
Sale of old bats and balls	2,000
Closing stock of bats and balls	4,000

**(Answer: Income and expenditure account: Bats and balls consumed ₹ 16,000 (Dr.)**

**Sale of old sports materials: ₹ 2,000 (Cr.)**

**Balance Sheet: Assets side: Stock of bats and balls: ₹ 4,000)**

16. Show how the following items appear in the income and expenditure account of Sirkazhi Singers Association?

	₹
Stock of stationery on 1.4.2018	2,600
Purchase of stationery during the year	6,500
Stock of stationery on 31.3.2019	2,200

**(Answer: Stationery consumed: ₹ 6,900 (Dr.))**

17. Chennai tennis club had Match fund showing credit balance of ₹ 24,000 on 1<sup>st</sup> April, 2018. Receipt to the fund during the year was ₹ 26,000. Match expenses incurred during the year was ₹ 33,000. How these items will appear in the final accounts of the club for the year ended 31<sup>st</sup> March, 2019?

(Answer: Balance sheet: Liabilities: Match fund: ₹ 17,000)

18. How will the following appear in the final accounts of Karaikudi sports club for the year ending 31<sup>st</sup> March, 2019?

Particulars	₹
Tournament fund on 1 <sup>st</sup> April 2018	90,000
Tournament fund investment on 1 <sup>st</sup> April 2018	90,000
Interest received on tournament fund investment	9,000
Donation to tournament fund	10,000
Tournament expenses	60,000

(Ans: Balance Sheet: Liabilities: Tournament fund: ₹ 49,000  
Assets: Tournament fund investment: ₹ 90,000)

19. Compute capital fund of Salem Sports Club as on 1.4.2019.

Particulars	₹	Particulars	₹
Sports equipment	30,000	Prize fund	10,000
Computer	25,000	Prize fund investments	10,000
Subscription outstanding for 2018-19	5,000	Cash in hand	7,000
Subscription received in advance for 2019-20	8,000	Cash at bank	21,000

(Ans: Capital fund: ₹ 80,000)

20. From the following Receipts and Payment account and from the information given below of Ramanathapuram Sports Club, prepare Income and Expenditure account for the year ended 31<sup>st</sup> December, 2018 and the balance sheet as on that date.

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> December, 2018 Cr.**

Receipts	₹	₹	Payments	₹	₹
To Balance b/d			By Rent		11,000
Cash in hand	5,000		By Entertainment		
Cash at bank	10,000	15,000	expenses		11,200
To Subscription			By Furniture		10,000
2017	12,000		By Sports materials		
2018	33,000		purchased		13,000
2019	16,000	61,000	By Match expenses		12,000
To Entrance fees		6,000	By Investments made		28,000
To General donations		7,000	By Balance c/d		
To Sale of old sports			Cash in hand	1,300	
materials		1,000	Cash at bank	4,000	5,300
To Miscellaneous					
receipts		500			
		90,500			90,500

Additional information:

(i) Capital fund as on 1<sup>st</sup> January 2018 ₹ 30,000.

(ii) Opening stock of sports material ₹ 3,000 and closing stock of sports material ₹ 5,000.

**(Answer: Surplus: ₹ 2,300; Balance sheet total: ₹ 48,300)**

21. From the following Receipts and Payment account of Yercaud Youth Association, prepare Income and expenditure account for the year ended 31<sup>st</sup> March, 2019 and the balance sheet as on that date.

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2019 Cr.**

Receipts	₹	Payments	₹
To Balance b/d		By Salary	14,000
Cash in hand	9,600	By Office expenses	7,200
To Government grants		By Books purchased	15,000
for purchase of books	10,000	By Stationery purchased	1,800
To Subscription	24,800	By Newspaper purchased	2,100
To Admission fees	2,000	By Prizes awarded	5,000
To Prize fund receipts	6,000	By Balance c/d	
To Bank interest	1,500	Cash in hand	9,900
To Sale of newspapers	1,100		
	55,000		55,000

Additional information:

(i) Opening capital fund ₹ 20,000.

- (ii) Stock of books on 1.4.2018 ₹ 9,200.  
 (iii) Subscription due but not received ₹ 1,700.  
 (iv) Stock of stationery on 1.4.2018 ₹ 1,200 and stock of stationery on 31.3.2019, ₹ 2,000

**(Answer: Surplus: ₹ 6,800; Balance sheet total: ₹ 37,800)**

22. Following is the Receipts and Payments account of Neyveli Science Club for the year ended 31<sup>st</sup> December, 2018.

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> December, 2018 Cr.**

Receipts	₹	Payments	₹	₹
To Balance b/d		By Balance b/d		
Cash in hand	2,400	Bank overdraft		1,000
To Subscription	8,700	By Postage expenses		200
To Life membership fees	5,000	By Science equipments		
To Exhibition fund receipts	7,000	purchased		10,000
To Sale of science		By Laboratory expenses		2,400
equipments (Book		By Secretary's honorarium		5,000
value ₹ 5,000)	6,000	By Audit fees		3,600
To Miscellaneous income	500	By General charges		1,800
		By Exhibition expenses		5,000
		By Balance c/d		
		Cash in hand	200	
		Cash at bank	400	600
	29,600			29,600

Additional information:

- (i) Opening capital fund ₹ 6,400  
 (ii) Subscription includes ₹ 600 for the year 2019  
 (iii) Science equipment as on 1.1.2018 ₹ 5,000  
 (iv) Surplus on account of exhibition should be kept in reserve for new auditorium.

Prepare income and expenditure account for the year ended 31<sup>st</sup> December, 2018 and the balance sheet as on that date.

**(Answer: Deficit: ₹ 3,400; Balance sheet total: ₹ 10,600)**

23. From the following Receipts and Payments account of Sivakasi Pensioner's Recreation Club, prepare income and expenditure account for the year ended 31<sup>st</sup> March, 2018 and the balance sheet as on that date.

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> March, 2018 Cr.**

Receipts	₹	₹	Payments	₹
To balance b/d			By Rent and rates	18,000
Cash in hand	10,000		By Electricity charges	17,000
Cash at bank	20,000	30,000	By Furniture purchased	12,000
To Subscription			By Billiards table purchased	70,000
2016 – 2017	5,000		By Repairs and renewals	16,000
2017 – 2018	25,000		By Special dinner expenses	4,000
2018 – 2019	6,000	36,000	By Sundry expenses	2,000
To Legacies		40,000	By Balance c/d	
To Rent from hall		14,000	Cash in hand	1,000
To Lockers rent		5,000		
To Collection for special dinner		12,000		
To Balance c/d				
Bank overdraft		3,000		
		1,40,000		1,40,000

Additional information:

- (i) The club had 300 members each paying ₹ 100 as annual subscription.
- (ii) The club had furniture ₹ 10,000 on 1.4.2017.
- (iii) The subscription still due but not received for the year 2016 – 2017 is ₹ 1,000.

**(Answer: Surplus: ₹ 4,000; Opening capital fund: ₹ 46,000; Balance sheet total: ₹ 99,000)**

24. Following is the Receipts and payments account of Virudhunagar Volleyball Association for the year ended 31<sup>st</sup> December, 2018.

**Dr. Receipts and Payments Account for the year ended 31<sup>st</sup> December, 2018 Cr.**

Receipts	₹	₹	Payments	₹	₹
To balance b/d			By Match expenses		25,000
Cash in hand		5,000	By Upkeep of pavilion		17,000
To Subscription			By Secretary's honorarium		18,000
2017	10,000		By Bats and balls purchased		22,000
2018	55,000		By Grass seeds		2,000
2019	5,000	70,000	By Fixed deposit		58,000
To Donations		40,000	By Sundry expenses		3,000
To Match fund receipts		30,000	By Balance c/d		
To Interest on fixed deposit		8,000	Cash in hand	7,000	
To Miscellaneous receipts		5,000	Cash at bank	6,000	13,000
		1,58,000			1,58,000

Additional information:

- (i) On 1.1.2018, the association owned investments ₹ 10,000, premises and grounds ₹ 40,000, stock of bats and balls ₹ 5,000.
- (ii) Subscription ₹ 5,000 related to 2017 is still due.
- (iii) Subscription due for the year 2018, ₹ 6,000.

Prepare income and expenditure account for the year ended 31<sup>st</sup> December, 2018 and the balance sheet as on that date.

**(Answer: Surplus ₹ 47,000; Opening capital fund: ₹ 75,000;  
Closing balance sheet total: ₹ 1,32,000)**

### CASE STUDY

Shankar is interested in playing chess. He joined a chess club. But, he could not pay the membership fee. He has little accounting knowledge. But, he is not familiar with the accounting records of the clubs and societies. The accountant of the club suggested him to help with maintaining the accounting records for the club, so that he need not pay the membership fee. The club also has a cafe, where members can buy snacks, coffee and tea. Shankar offered his help to the café too. He is not clear on certain terms and accounting practices of the club. But, he is so eager to learn. He needs explanation on the following.

- 1) What is the main source of income for the club?
- 2) Is receipts and payments account the same as cash book?
- 3) Are the members allowed to draw money when a club has surplus of income?
- 4) How is donation treated?
- 5) If the members do not pay the membership fee at the end of the accounting period, how will this be considered and treated in the accounting records?

### To explore further

A music club has many members. It finds it difficult to maintain the records of all the members. Sometimes, it loses the track of membership fee. Is there possible way for the club to record the data efficiently?

### Reference

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# UNIT 3

## ACCOUNTS OF PARTNERSHIP FIRMS– FUNDAMENTALS



### Contents

- 3.1 Introduction
- 3.2 Meaning, definition and features of partnership
- 3.3 Partnership deed
- 3.4 Application of the provisions of the Indian Partnership Act, 1932 in the absence of partnership deed
- 3.5 Final accounts of partnership firms
- 3.6 Methods of maintaining capital accounts of partners
- 3.7 Interest on capital and interest on drawings of partners
- 3.8 Salary and commission to partners
- 3.9 Interest on loan from partners
- 3.10 Division of profits among partners
- 3.11 Profit and loss appropriation account



### Points to recall

The following points are to be recalled before learning the accounts of partnership firms–fundamentals:

- ◇ Forms of organisation
- ◇ Accounting cycle



### Learning objectives

- To enable the students to
- ◇ Understand the meaning and features of partnership
  - ◇ Understand fixed and fluctuating capital methods of maintaining capital accounts of partners
  - ◇ Understand the calculation and accounting treatment of interest on capital, interest on drawings, remuneration to partners and interest on loan from partners
  - ◇ Understand the division of profits among partners

### Key terms to know

- ◇ Partner
- ◇ Partnership firm
- ◇ Partnership deed
- ◇ Fixed capital
- ◇ Fluctuating capital
- ◇ Interest on capital
- ◇ Interest on drawings
- ◇ Profit and loss appropriation account



## 3.1 Introduction



### Student activity 3.1

**Think:** Ramu is a successful sole trader. His business has been progressing steadily for the past 10 years. Now, he finds it difficult to manage the business all alone. His friend wants to join his business and likes to have equal status as Ramu has. But, Ramu does not want to give up his ownership and control over the business. Is it possible for Ramu to accept his friend's willingness to join him without losing his ownership and control over his business?

Partnership firm is a form of organisation where two or more persons carry on some business activity on the basis of agreement among them. The persons who have agreed to carry on the partnership business are individually called 'partners' and collectively called as 'firm'. The name under which the business of a firm is carried on is called the 'firm name'. In the case of partnership, the purpose of many persons joining together may be to raise more capital, to pool expertise, to share responsibilities and liabilities, etc. Thus, to overcome the limitations of sole proprietorship such as limited capital, small size of business, etc, partnership firms are formed. The profit or loss arising from the partnership business is shared by the partners in the agreed ratio.

In India, partnership firms are governed by the Indian Partnership Act, 1932. Registration of partnership firm is not compulsory. It is optional. However, it is safer for the partnership firms to get registered so that the partners can avail the benefits of registration.

## 3.2 Meaning, definition and features of partnership

### 3.2.1 Meaning and definition of partnership

When two or more persons join together to form a business to share the profit or loss arising therefrom in an agreed ratio, the relationship among them is called partnership. The business may be carried on by all or any of them acting for all.

According to Section 4 of the Indian Partnership Act, 1932, partnership is defined as, "the relation between persons who have agreed to share the profits of a business carried on by all or any of them acting for all".

### 3.2.2 Features of partnership

Following are the essential features of partnership:

1. Partnership is an association of two or more persons. The maximum number of partners is limited to 50.
2. There should be an agreement among the persons to share the profit or loss of the business. The agreement may be oral or written or implied.
3. The agreement must be to carry on a business and to share the profits of the business.
4. The business may be carried on by all the partners or any of them acting for all.



The maximum number of partners is not specified/ prescribed in the Indian Partnership Act, 1932. But, the Indian Companies Act, 2013 specifies the maximum number of partners.

As per Section 464(1) of the Indian Companies Act, 2013, no association or partnership consisting of more than such number of persons as may be prescribed shall be formed for the purpose of carrying on any business, provided that the number of persons which may be prescribed under this sub-section shall not exceed one hundred. Rule 10 of Companies (Miscellaneous) Rules 2014 specifies the limit as 50. Thus, the maximum number of partners in a partnership firm is 50.

### 3.3 Partnership deed

Partnership deed is a document in writing that contains the terms of the agreement among the partners. It is not compulsory for a partnership to have a partnership deed as per the Indian Partnership Act, 1932. But, it is desirable to have a partnership deed as it serves as an evidence of the terms of the agreement among the partners.

#### 3.3.1 Contents of partnership deed

Generally, partnership deed contains the following:

1. Name of the firm and nature and place of business
2. Date of commencement and duration of business
3. Names and addresses of all partners
4. Capital contributed by each partner
5. Profit sharing ratio
6. Amount of drawings allowed to each partner
7. Rate of interest to be allowed on capital
8. Rate of interest on drawings of partners
9. Rate of interest on loans provided by partners
10. Amount of salary to be allowed to any partner
11. Maintenance of accounts and audit procedures
12. Procedure for admission of a new partner
13. Procedure for retirement of a partner and settlement of dues to the retired partner
14. Method of valuation of goodwill and valuation of assets and liabilities at the time of admission or retirement or death of a partner.
15. Appointment of executors in case of death of a partner and settlement of dues to the legal heirs.
16. Settlement of accounts on dissolution of the firm.



### Student activity 3.2

Raja and Ravi entered into a partnership. They orally agreed to share profits and losses in the ratio of 2:1. At the end of the year, Raja demands  $\frac{3}{4}$  of the profit as he worked more than Ravi. Ravi does not agree to this. How can this situation be dealt with?

## 3.4 Application of the provisions of the Indian Partnership Act, 1932 in the absence of partnership deed

If there is no partnership deed or when there is no express statement in the partnership deed, then the following provisions of the Act will apply:

- (i) **Remuneration to partners**  
No salary or remuneration is allowed to any partner. [Section 13(a)]
- (ii) **Profit sharing ratio**  
Profits and losses are to be shared by the partners equally. [Section 13(b)]
- (iii) **Interest on capital**  
No interest is allowed on the capital. Where a partner is entitled to interest on capital contributed as per partnership deed, such interest on capital will be payable only out of profits. [Section 13(c)]
- (iv) **Interest on loans advanced by partners to the firm**  
Interest on loan is to be allowed at the rate of 6 per cent per annum. [Section 13(d)]
- (v) **Interest on drawings**  
No interest is charged on the drawings of the partners.

### Illustration 1

A, B, C and D are partners in a firm. There is no partnership deed. How will you deal with the following?

- (i) A has contributed maximum capital. He demands interest on capital at 12% per annum.
- (ii) B has withdrawn ₹ 1,000 per month. Other partners ask B to pay interest on drawings @ 10% per annum to the firm. But, B does not agree to it.
- (iii) Loan advanced by C to the firm is ₹ 10,000. He demands interest on loan @ 9% per annum. A and B do not agree with this.
- (iv) D demands salary at the rate of ₹ 5,000 per month as he spends full time for the business. B and C do not agree with this.
- (v) A demands the profit to be shared in the capital ratio. But, B, C and D do not agree.

### Solution

Since there is no partnership deed, provisions of the Indian Partnership Act, 1932 will apply.

- (i) No interest on capital is payable to any partner. Therefore, A is not entitled to interest on capital.

- (ii) No interest is chargeable on drawings made by the partner. Therefore, B need not pay interest on drawings.
- (iii) Interest on loan is payable at 6% per annum. Therefore C is to get interest at 6% per annum on ₹ 10,000.
- (iv) No remuneration is payable to any partner. Hence, D is not entitled to salary.
- (v) Profits should be distributed equally.

### 3.5 Final accounts of partnership firms

The final accounts prepared by partnership firms are:

- (a) Manufacturing account – if manufacturing activity is carried on
- (b) Trading and profit and loss account – to ascertain profitability
- (c) Profit and loss appropriation account – to show the disposal of profits and surplus
- (d) Balance sheet – to ascertain the financial status.

The procedure for preparation of final accounts of a partnership firm is the same like sole proprietorship business except the following:

- (i) In sole proprietorship, the profit or loss in the profit and loss account is transferred directly to the sole proprietor's capital account. In partnership, profit and loss appropriation account is prepared to which net profit or loss from profit and loss account is transferred. In the profit and loss appropriation account, adjustments for interest on capital, interest on drawings, salary and other remuneration due to the partners are shown. Finally, the balance in the appropriation account is transferred to the partners' capital account in the profit sharing ratio.
- (ii) Capital account balance of the sole proprietor alone is shown in the balance sheet of sole proprietorship. The balance sheet of a partnership concern shows the balances in the individual capital accounts (and current accounts) of the partners.

### 3.6 Methods of maintaining capital accounts of partners

Amount invested by partners in the partnership business is called partners' capital. Capital may be contributed by a partner in cash or in the form of assets, etc. For each partner, a separate capital account is maintained. Capital accounts of partners of a firm may be maintained by following two methods: (i) Fixed capital method and (ii) Fluctuating capital method.

#### 3.6.1 Fixed capital method

Under fixed capital method, the capital of the partners is not altered and it remains generally fixed. Two accounts are maintained for each partner namely (a) Capital account and (b) Current account. The transactions relating to initial capital introduced, additional capital introduced and capital permanently withdrawn are entered in the capital account and all other transactions are recorded in the current account.

### (a) Partners' capital account

Capital account is credited with the original amount of capital introduced by a partner into the business and any additional capital introduced by him/her in the subsequent years. The account is debited with the amount of capital permanently withdrawn by a partner from the business. No other items are debited or credited to this account. Capital account will always show credit balance under this method. The balance of capital account remains the same unless any additional capital is introduced or capital is permanently withdrawn.

#### Format of partners' capital account under fixed capital method

Dr.		Partners' capital account				Cr.	
Date	Particulars	A	B	Date	Particulars	A	B
		₹	₹			₹	₹
	To Cash/Bank A/c	xxx	xxx		By Balance b/d	xxx	xxx
	(permanent withdrawal of capital)				By Cash/Bank A/c	xxx	xxx
	To Balance c/d	xxx	xxx		(additional capital introduced)		
		xxx	xxx			xxx	xxx

### (b) Partners' current account

Partners' current account is prepared for recording all transactions between the partner and the firm other than initial capital introduced, additional capital introduced and capital permanently withdrawn. This account is credited with interest on capital, partner's salary or commission and share of profit to the partner. This account is debited with drawings, interest on drawings and share of loss of the partner. As a result, the balance in this account changes periodically. Current account may show either credit balance or debit balance.

#### Format of partners' current account under fixed capital method

Dr.		Partners' current account				Cr.	
Date	Particulars	A	B	Date	Particulars	A	B
		₹	₹			₹	₹
	To Balance b/d*	xxx	xxx		By Balance b/d*	xxx	xxx
	To Drawings A/c	xxx	xxx		By Interest on capital A/c	xxx	xxx
	To Interest on drawings A/c	xxx	xxx		By Salary A/c	xxx	xxx
	To Profit and loss appropriation A/c (share of loss)	xxx	xxx		By Commission A/c	xxx	xxx
	To Balance c/d**	xxx	xxx		By Profit and loss appropriation A/c (share of profit)	xxx	xxx
		xxx	xxx		By Balance c/d**	xxx	xxx
		xxx	xxx			xxx	xxx

Note: \* The opening balance may be either credit balance or debit balance for a partner.

\*\* The closing balance may be either credit balance or debit balance for a partner.

Credit balance is the amount due to the partner from the firm. It is shown on the liabilities side of the balance sheet. Debit balance is the amount due from the partner to the firm. It is shown on the assets side of the balance sheet.

### Illustration 2

From the following information, prepare capital accounts of partners Shanthi and Sumathi, when their capitals are fixed.

Particulars	Shanthi	Sumathi
	₹	₹
Capital on 1 <sup>st</sup> January 2018	1,00,000	80,000
Current account on 1 <sup>st</sup> January 2018 (Cr.)	5,000	3,000
Additional capital introduced on 1 <sup>st</sup> June 2018	10,000	20,000
Drawings during 2018	20,000	13,000
Interest on drawings	500	300
Share of profit for 2018	10,000	8,000
Interest on capital	6,300	5,400
Salary	9,000	Nil
Commission	Nil	1,200

### Solution

#### Dr. Partners' Capital Account Cr.

Date	Particulars	Shanthi ₹	Sumathi ₹	Date	Particulars	Shanthi ₹	Sumathi ₹
2018				2018			
Jan 1				Jan 1	By Balance b/d	1,00,000	80,000
Dec 31	To Balance c/d	<b>1,10,000</b>	<b>1,00,000</b>	June 1	By Bank (Additional capital)	10,000	20,000
		1,10,000	1,00,000			1,10,000	1,00,000
				2019			
				Jan 1	By Balance b/d	1,10,000	1,00,000

#### Dr. Partners' Current Account Cr.

Date	Particulars	Shanthi ₹	Sumathi ₹	Date	Particulars	Shanthi ₹	Sumathi ₹
	To Drawings	20,000	13,000		By Balance b/d	5,000	3,000
	To Interest on drawings	500	300		By Profit and loss appropriation A/c (share of profit)	10,000	8,000
	To Balance c/d	<b>9,800</b>	<b>4,300</b>		By Interest on capital	6,300	5,400
					By Salary	9,000	-
					By Commission	-	1,200
		30,300	17,600			30,300	17,600
					By Balance b/d	9,800	4,300

### Illustration 3

Bragathish and Naresh are partners who maintain their capital accounts under fixed capital method. From the following particulars, prepare capital accounts of partners.

Particulars	Bragathish ₹	Naresh ₹
Capital on 1 <sup>st</sup> April 2018	4,00,000	6,00,000
Current account on 1 <sup>st</sup> April 2018	20,000(Cr.)	15,000(Dr.)
Additional capital introduced during the year	50,000	Nil
Drawings made during the year	45,000	60,000
Interest on drawings	2,000	3,000
Share of profit for the year	80,000	1,20,000
Interest on capital	20,000	30,000
Commission	17,000	Nil
Salary	Nil	38,000

### Solution

#### Dr. Partners' Capital Account Cr.

Date	Particulars	Bragathish ₹	Naresh ₹	Date	Particulars	Bragathish ₹	Naresh ₹
	To Balance c/d	4,50,000	6,00,000		By Balance b/d	4,00,000	6,00,000
					By Bank A/c (Additional capital)	50,000	-
		4,50,000	6,00,000			4,50,000	6,00,000
					By Balance b/d	4,50,000	6,00,000

#### Dr. Partners' Current Account Cr.

Date	Particulars	Bragathish ₹	Naresh ₹	Date	Particulars	Bragathish ₹	Naresh ₹
	To Balance b/d	-	15,000		By Balance b/d	20,000	-
	To Drawings A/c	45,000	60,000		By Profit and loss appropriation A/c (share of profit)	80,000	1,20,000
	To Interest on drawings A/c	2,000	3,000				



	To Balance c/d	90,000	1,10,000		By Interest on capital A/c	20,000	30,000
					By Commission A/c	17,000	-
					By Salary A/c	-	38,000
		1,37,000	1,88,000			1,37,000	1,88,000
					By Balance b/d	90,000	1,10,000

### 3.6.2 Fluctuating capital method

Under this method, only capital account is maintained for each partner. All the transactions between the partner and the firm are recorded in the capital account. This account is credited with initial and additional capital introduced by the partner, interest on capital, partner's salary or commission and share of profit of the partner. The account is debited with capital withdrawn, drawings, interest on drawings and share of loss of the partner. As a result, the balance in this account goes on fluctuating periodically. Under this method, the partner's capital account may show either credit balance or debit balance.

#### Format of capital account under fluctuating capital method

Dr.		Partners' capital account				Cr.	
Date	Particulars	A	B	Date	Particulars	A	B
		₹	₹			₹	₹
	To Cash / Bank A/c (capital withdrawn)	xxx	xxx		By Balance b/d	xxx	xxx
	To Drawings A/c	xxx	xxx		By Cash / Bank A/c (additional capital introduced)	xxx	xxx
	To Interest on drawings A/c	xxx	xxx		By Interest on capital A/c	xxx	xxx
	To Profit and loss appropriation A/c (share of loss)	xxx	xxx		By Salary A/c	xxx	xxx
	To Balance c/d	xxx	xxx		By Commission A/c	xxx	xxx
		xxx	xxx		By Profit and loss appropriation A/c (share of profit)	xxx	xxx
		xxx	xxx			xxx	xxx

### Illustration 4

From the following information, prepare capital accounts of partners Mannan and Sevagan, when their capitals are fluctuating.

Particulars	Mannan ₹	Sevagan ₹
Capital on 1 <sup>st</sup> January 2018 (Cr. balance)	2,00,000	1,75,000
Drawings during 2018	40,000	35,000
Interest on drawings	1,000	500
Share of profit for 2018	21,000	16,500
Interest on capital	12,000	10,500
Salary	18,000	Nil
Commission	Nil	2,500

### Solution

Dr. Partners' Capital A/c Cr.

Particulars	Mannan ₹	Sevagan ₹	Particulars	Mannan ₹	Sevagan ₹
To Drawings A/c	40,000	35,000	By Balance b/d	2,00,000	1,75,000
To Interest on drawings A/c	1,000	500	By Profit and loss appropriation A/c	21,000	16,500
To Balance c/d	<b>2,10,000</b>	<b>1,69,000</b>	By Interest on capital A/c	12,000	10,500
			By Salary A/c	18,000	-
			By Commission A/c	-	2,500
	2,51,000	2,04,500		2,51,000	2,04,500
			By Balance b/d	2,10,000	1,69,000

### 3.6.3 Differences between fixed capital method and fluctuating capital method

Following are the differences between fixed capital method and fluctuating capital method of maintaining capital accounts of partners:

Basis of distinction	Fixed capital method	Fluctuating capital method
1. Number of accounts	Two accounts are maintained for each partner, that is, capital account and current account.	Only one account, that is, capital account is maintained for each partner.

2. Change in capital	The amount of capital normally remains unchanged except when additional capital is introduced or capital is withdrawn permanently.	The amount of capital changes from period to period.
3. Closing balance	Capital account always shows a credit balance. But, current account may show either debit or credit balance.	Capital account generally shows credit balance. It may also show a debit balance.
4. Adjustments	All adjustments relating to interest on capital, interest on drawings, salary or commission, share of profit or loss are done in current account.	All adjustments relating to interest on capital, interest on drawings, salary or commission, share of profit or loss are done in the capital account.

### 3.7 Interest on capital and interest on drawings of partners

#### 3.7.1 Interest on capital

Interest on capital is the interest allowed on capital of the partners. In general, if the capitals of partners are disproportionate to the profit sharing ratio the partners may agree to allow interest on capital. It will compensate the partners who have contributed high amount towards capitals. The rate of interest on capital is generally agreed by the partners and is mentioned in the partnership deed. It is allowed only when there is profit and it is provided before division of profits among the partners. No interest is allowed on the capitals of partners, if it is not specifically mentioned in the partnership deed.

When the firm incurs loss, interest on capital will not be provided. If there is insufficient profit, that is, the net profit is less than the amount of interest on capital, interest on capital will not be provided, but the profit will be distributed among the partners in their capital ratio.

Following are the journal entries to be made in the books of the partnership firm.

#### (a) For providing interest on capital

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Interest on capital A/c Dr. To Partner's capital / current A/c		xxx	xxx

**Note:** Interest on capital is due to the partners from the firm hence partner's capital/current account is credited and interest on capital account is debited.

#### (b) For closing interest on capital account

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Profit and loss appropriation A/c Dr. To Interest on capital A/c		xxx	xxx

### 3.7.2 Calculation of interest on capital

Interest on capital is to be calculated on the capitals at the beginning for the relevant period. If there is any additional capital introduced or capital withdrawn during the year, it will cause change in the capitals and interest is to be calculated proportionately on the changed capitals for the relevant period.

**Interest on capital = Amount of capital x Rate of interest per annum x Period of interest**

**Tutorial note:** If capital at the beginning is not given, then it can be calculated as below:

Particulars	₹	₹
Capital at the end		XXX
Add: Drawings during the year (if fluctuating capital)	XXX	
Capital withdrawn during the year	XXX	XXX
Less: Profit credited during the year (if fluctuating capital)	XXX	XXX
Additional capital introduced during the year	XXX	XXX
Capital at the beginning		XXX

### Illustration 5

Mannan and Ramesh share profits and losses in the ratio of 3:1. The capital on 1st April 2017 was ₹ 80,000 for Mannan and ₹ 60,000 for Ramesh and their current accounts show a credit balance of ₹ 10,000 and ₹ 5,000 respectively. Calculate interest on capital at 5% p.a. for the year ending 31st March 2018 and show the journal entries.

#### Solution

##### Calculation of interest on capital:

Interest on capital = Amount of capital x Rate of interest

Interest on Mannan's capital = 80,000 x 5/100 = ₹ 4,000

Interest on Ramesh's capital = 60,000 x 5/100 = ₹ 3,000

**Note:** Balance of current account will not be considered for calculation of interest on capital.

Date	Particulars	L.F.	Debit ₹	Credit ₹
2018	Interest on capital A/c	Dr.	7,000	
March 31	To Mannan's current A/c			4,000
	To Ramesh's current A/c			3,000
	(Interest on capital provided)			

„	Profit and loss appropriation A/c	Dr.		7,000	
	To Interest on capital A/c				7,000
	(Interest on capital closed)				

### Illustration 6

Antony and Akbar were partners who share profits and losses in the ratio of 3:2. Balance in their capital account on 1st January 2018 was Antony ₹ 60,000 and Akbar ₹ 40,000. On 1st April 2018 Antony introduced additional capital of ₹ 10,000. Akbar introduced additional capital of ₹ 5,000 during the year. Calculate interest on capital at 6% p.a. for the year ending 31st December 2018.

#### Solution

##### Calculation of interest on capital:

##### Interest on Antony's capital:

$$\begin{aligned} \text{On opening capital for 1 year} &= 60,000 \times \frac{6}{100} = ₹ 3,600 \\ \text{On additional capital for 9 months} &= 10,000 \times \frac{6}{100} \times \frac{9}{12} = ₹ \underline{450} \\ \text{Interest on capital} &= ₹ \underline{\underline{4,050}} \end{aligned}$$

##### Interest on Akbar's capital:

$$\begin{aligned} \text{On opening capital for 1 year} &= 40,000 \times \frac{6}{100} = ₹ 2,400 \\ \text{On additional capital for 6 months} &= 5,000 \times \frac{6}{100} \times \frac{6}{12} = ₹ \underline{150} \\ \text{Interest on capital} &= ₹ \underline{\underline{2,550}} \end{aligned}$$

**Note:** Since the date of additional capital introduced by Akbar is not given, interest on additional capital is calculated for an average period of 6 months.

### Illustration 7

The capital account of Arivazhagan and Srinivasan on 1st January 2017 showed a balance of ₹ 15,000 and ₹ 10,000 respectively. On 1st July 2017, Arivazhagan introduced an additional capital of ₹ 5,000 and on 1st September 2017 Srinivasan introduced an additional capital of ₹ 10,000.

Calculate interest on capital at 6% p.a. for the year ending 31st December 2017.

#### Solution

##### Calculation of interest on capital:

##### Arivazhagan:

$$\begin{aligned} \text{On opening capital for 1 year} &= 15,000 \times \frac{6}{100} = ₹ 900 \\ \text{On additional capital for 6 months} &= 5,000 \times \frac{6}{100} \times \frac{6}{12} = ₹ \underline{150} \\ \text{Interest on capital} &= ₹ \underline{\underline{1,050}} \end{aligned}$$

**Srinivasan:**

$$\text{On opening capital for 1 year} = 10,000 \times \frac{6}{100} = ₹ 600$$

$$\text{On additional capital for 4 months} = 10,000 \times \frac{6}{100} \times \frac{4}{12} = ₹ 200$$

$$\text{Total interest on capital} = ₹ \underline{\underline{800}}$$

**Illustration 8**

From the following balance sheets of Subha and Sudha who share profits and losses equally, calculate interest on capital at 6% p.a. for the year ending 31st December 2017.

**Balance sheet as on 31st December 2017**

Liabilities	₹	Assets	₹
Capital accounts:		Fixed assets	30,000
Subha	15,000	Current assets	20,000
Sudha	20,000		
Current liabilities	15,000		
	50,000		50,000

Drawings of Subha and Sudha during the year were ₹ 2,500 and ₹ 3,500 respectively. Profit earned during the year was ₹ 15,000.

**Solution**

Particulars	Subha ₹	Sudha ₹
Capital on 31 <sup>st</sup> December 2017	15,000	20,000
Add: Drawings	2,500	3,500
	17,500	23,500
Less: Profit already credited	7,500	7,500
Capital on 1 <sup>st</sup> January 2017	10,000	16,000

**Calculation of interest on capital:****Subha:**

$$\text{On opening capital} = 10,000 \times \frac{6}{100} = ₹ 600$$

**Sudha:**

$$\text{On opening capital} = 16,000 \times \frac{6}{100} = ₹ 960$$

**Illustration 9**

From the following balance sheets of Brindha and Praveena who share profits and losses in the ratio of 3:4, calculate interest on capital at 6% p.a. for the year ending 31st December 2017.

### Balance sheet as on 31st December 2017

Liabilities	₹	Assets	₹
Capital accounts:		Sundry assets	80,000
Brindha	30,000		
Praveena	40,000		
Profit and loss appropriation A/c	10,000		
	80,000		80,000

On 1st July 2017, Brindha introduced an additional capital of ₹ 6,000 and on 1st October 2017, Praveena introduced ₹ 10,000. Drawings of Brindha and Praveena during the year were ₹ 5,000 and ₹ 7,000 respectively. Profit earned during the year was ₹ 31,000.

#### Solution

Particulars	Brindha		Praveena	
	₹	₹	₹	₹
Capital on 31 <sup>st</sup> December 2017		30,000		40,000
Add: Drawings		5,000		7,000
		35,000		47,000
Less:				
Additional capital	6,000		10,000	
Profit already credited*	9,000	15,000	12,000	22,000
Capital on 1 <sup>st</sup> January 2017		20,000		25,000

\* Profit credited = Profit earned ₹ 31,000 – Balance profit as per balance sheet ₹ 10,000 = ₹ 21,000. This amount is distributed in their profit sharing ratio of 3:4.

#### Calculation of interest on capital:

##### Brindha:

$$\text{On opening capital for 1 year} = 20,000 \times \frac{6}{100} = ₹ 1,200$$

$$\text{On additional capital for 6 months} = 6,000 \times \frac{6}{100} \times \frac{6}{12} = ₹ 180$$

$$\text{Total interest on capital} = \underline{\underline{₹ 1,380}}$$

**Praveena:**

$$\text{On opening capital for 1 year} = 25,000 \times \frac{6}{100} = ₹ 1,500$$

$$\text{On additional capital for 3 months} = 10,000 \times \frac{6}{100} \times \frac{3}{12} = ₹ 150$$

$$\text{Total interest on capital} = ₹ 1,650$$

### Illustration 10

A and B contribute ₹ 4,00,000 and ₹ 2,00,000 respectively as capital. Their respective share of profit is 3:2 and the profit before interest on capital for the year is ₹ 27,000. Compute the amount of interest on capital in each of the following situations:

- (i) if the partnership deed is silent as to the interest on capital
- (ii) if interest on capital @ 3% is allowed as per the partnership deed
- (iii) if the partnership deed allows interest on capital @ 5% p.a.

### Solution

- (i) Interest on capital will not be allowed as the partnership deed is silent as to the interest on capital.
- (ii) Profit before interest on capital is ₹ 27,000.

#### Computation of interest on capital:

$$\text{A: } 4,00,000 \times \frac{3}{100} = ₹ 12,000$$

$$\text{B: } 2,00,000 \times \frac{3}{100} = ₹ 6,000$$

Since there is sufficient profit, interest on capital will be provided.

- (iii) Profit before interest on capital is ₹ 27,000.

#### Computation of interest on capital:

$$\text{A: } 4,00,000 \times \frac{5}{100} = ₹ 20,000$$

$$\text{B: } 2,00,000 \times \frac{5}{100} = ₹ 10,000$$

Since the profit is insufficient, interest on capital will not be provided. Profit of ₹ 27,000 will be distributed to the partners in their capital ratio of 2:1.

### 3.7.3 Interest on drawings

Interest is charged on drawings made by the partners only when there is an agreement among the partners in this regard. The rate of interest on drawings will be the rate agreed by the partners. Following are the journal entries to be made in the books of the partnership firm.



(a) For charging interest on drawings

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Partner's capital/ current A/c To Interest on drawings A/c	Dr.	xxx	xxx

**Note:** Interest on drawings is due from the partner to the firm and hence partner's capital/ current account is debited and interest on drawings account is credited.

(b) For closing interest on drawings account

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Interest on drawings A/c To Profit and loss appropriation A/c	Dr.	xxx	xxx

### 3.7.4 Calculation of interest on drawings

Interest on drawings can be computed by following either direct method or product method. Also if the partners withdraw fixed amount at fixed time interval, interest on drawings may be calculated on the basis of the average period method. Based on the dates of drawings and the amount of drawings, different methods can be followed for calculating interest on drawings.

(i) Direct method

Interest is calculated on drawings for the period from the date of drawings to the date of closing date of the accounting year. The following formula is used to compute the interest on drawings:

$$\text{Interest on drawings} = \text{Amount of drawings} \times \text{Rate of interest} \times \text{Period of interest}$$

Period of interest refers to the period from the date of drawings to the closing date of the accounting year. This method is suitable when different amounts are withdrawn at different time intervals.

#### Illustration 11

Velan is a partner who withdrew ₹ 20,000 on 1st April 2018. Interest on drawings is charged at 10% per annum. Calculate interest on drawings on 31st December 2018 and pass journal entries by assuming fluctuating capital method.

**Solution**

$$\text{Interest on drawings} = \text{Amount of drawings} \times \text{Rate of interest} \times \text{Period of interest}$$

$$= ₹ 20,000 \times \frac{10}{100} \times \frac{9}{12} = ₹ 1,500$$



Date	Particulars	L.F.	Debit ₹	Credit ₹
2018 Dec. 31	Velan's capital A/c To Interest on drawings A/c (Interest on drawings charged)	Dr.	1,500	1,500
,,	Interest on drawings A/c To Profit and loss appropriation A/c (Interest on drawings account closed)	Dr.	1,500	1,500

### Illustration 12

Arun is a partner in a partnership firm. As per the partnership deed, interest on drawings is charged at 12% p.a. During the year ended 31st December 2018 he drew as follows:

Date	₹
March 1	6,000
June 1	4,000
September 1	5,000
December 1	2,000

Calculate the amount of interest on drawings.

### Solution

Interest on drawings = Amount of drawings x Rate of interest x Period of interest

$$\text{Withdrawal on March 1} = ₹ 6,000 \times \frac{12}{100} \times \frac{10}{12} = ₹ 600$$

$$\text{Withdrawal on June 1} = ₹ 4,000 \times \frac{12}{100} \times \frac{7}{12} = ₹ 280$$

$$\text{Withdrawal on September 1} = ₹ 5,000 \times \frac{12}{100} \times \frac{4}{12} = ₹ 200$$

$$\text{Withdrawal on December 1} = ₹ 2,000 \times \frac{12}{100} \times \frac{1}{12} = ₹ 20$$

$$\text{Total interest on drawings} = ₹ 1,100$$

### Illustration 13

Arul is a partner in a partnership firm. As per the partnership deed, interest on drawings is charged at 12% p.a. During the year ended 31st December 2018 he drew as follows:



Date	₹
March 1	3,000
June 1	3,000
September 1	3,000
December 1	3,000

Calculate the amount of interest on drawings.

**Solution**

Interest on drawings = Amount of drawings × Rate of interest × Period of interest

$$\text{Withdrawal on March 1} = ₹ 3,000 \times \frac{12}{100} \times \frac{10}{12} = ₹ 300$$

$$\text{Withdrawal on June 1} = ₹ 3,000 \times \frac{12}{100} \times \frac{7}{12} = ₹ 210$$

$$\text{Withdrawal on September 1} = ₹ 3,000 \times \frac{12}{100} \times \frac{4}{12} = ₹ 120$$

$$\text{Withdrawal on December 1} = ₹ 3,000 \times \frac{12}{100} \times \frac{1}{12} = ₹ 30$$

$$\text{Total interest on drawings} = ₹ 660$$

**Illustration 14**

Rajan is a partner who withdrew ₹ 30,000 during the year 2018. Interest on drawings is charged at 10% per annum. Calculate interest on drawings on 31st December, 2018.

**Solution**

$$\begin{aligned} \text{Interest on Drawings} \\ = 30,000 \times \frac{10}{100} \times \frac{6}{12} = ₹ 1,500 \end{aligned}$$

**Note:** Since, date of drawings is not given, interest is calculated for an average period of six months.

**(ii) Product method**

Under product method, interest is calculated on the total of the products, that is, the product of amount of drawings and the period for which the amount remained withdrawn. If the product is calculated in terms of months, then interest is calculated on the total of products at the rate per month. If the product is calculated in terms of days, then interest is calculated on the total of products at the rate per day. This method can be used in all situations as an alternative to direct method.



Product method is based on the principle that interest on the amount for a number of days/months is the same as interest for one day/month on the sum of the products of amount withdrawn and the period of interest.

The procedure for calculating interest on drawings under product method is as follows:

- (i) Multiply each amount withdrawn by the relevant period (in months) to find out the individual product.
- (ii) Find out the sum of all the individual products.
- (iii) Calculate interest at the prescribed rate for one month by using the following formula.

$$\text{Interest on drawings} = \text{Sum of products} \times \text{Rate of interest p.a.} \times \frac{1}{12}$$

### Tutorial note

If the period of interest is taken in days, each amount withdrawn is to be multiplied by the relevant period (in days) to find out the individual product and the following formula is to be used to find out the interest on drawings.

$$\text{Interest on drawings} = \text{Sum of products} \times \text{Rate of interest p.a.} \times \frac{1}{365}$$

### Illustration 15

Anbu is a partner in a partnership firm. As per the partnership deed, interest on drawings is charged at 12% p.a. During the year ended 31st December 2018 he drew as follows:

Date	₹
March 1	6,000
June 1	4,000
September 1	5,000
December 1	2,000

Calculate the amount of interest on drawings by using product method.

### Solution

Calculation of interest on drawings under product method

Date of drawings	Amount withdrawn ₹	Period up to December 31 (months)	Product ₹
March 1	6,000	10	60,000
June 1	4,000	7	28,000
September 1	5,000	4	20,000
December 1	2,000	1	2,000
Sum of product			1,10,000

$$\begin{aligned} \text{Interest on drawings} &= \text{Sum of product} \times \text{Rate of interest} \times \frac{1}{12} \\ &= 1,10,000 \times \frac{12}{100} \times \frac{1}{12} = ₹ 1,100 \end{aligned}$$



### (iii) Average period method

If the partners withdraw fixed amount at fixed time interval, interest on drawings may be calculated on the basis of the average period. Fixed time interval refers to withdrawal made monthly, quarterly, half-yearly, once in 2 months and once in 4 months. The following formula may be used to calculate interest on drawings:

$$\text{Interest on drawings} = \left[ \frac{\text{Total amount of drawings made during the year}}{\quad} \right] \times \left[ \frac{\text{Rate of interest per annum}}{\quad} \right] \times \left[ \frac{\text{Average period}}{12} \right]$$

$$\text{Average period} = \frac{\left[ \frac{\text{Number of months from the date of first withdrawal to the end of the year}}{\quad} \right] + \left[ \frac{\text{Number of months from the date of last withdrawal to the end of the year}}{\quad} \right]}{2}$$

Average period is computed as follows:

The following table shows the average period in months for withdrawal made at the beginning, in the middle and at the end of every month, quarter and half-year of the year.

Frequency of withdrawal	Average period (in months)		
	Time of withdrawal		
	At the beginning	In the middle	At the end
Monthly	$\frac{(12+1)}{2} = 6.5$	$\frac{(11.5+0.5)}{2} = 6$	$\frac{(11+0)}{2} = 5.5$
Quarterly	$\frac{(12+3)}{2} = 7.5$	$\frac{(10.5+1.5)}{2} = 6$	$\frac{(9+0)}{2} = 4.5$
Half-yearly	$\frac{(12+6)}{2} = 9$	$\frac{(9+3)}{2} = 6$	$\frac{(6+0)}{2} = 3$

### Illustration 16

John is a partner in a firm. He withdraws ₹ 1,000 p.m. regularly. Interest on drawings is charged @ 5% p.a. Calculate the interest on drawings using average period, if he draws

- at the beginning of every month
- in the middle of every month
- at the end of every month

### Solution

Total amount withdrawn =  $1,000 \times 12 = ₹ 12,000$

(i) If drawings are made at the beginning of every month:

Average period = 6.5

$$\text{Interest on drawings} = \text{Total amount of drawings} \times \text{Rate of interest} \times \frac{\text{Average period}}{12}$$

$$= ₹ 12,000 \times \frac{5}{100} \times \frac{6.5}{12} = ₹ 325$$

**(ii) If drawings are made in the middle of every month:**

Average period = 6

$$\begin{aligned} \text{Interest on drawings} &= \text{Total amount of drawings} \times \text{Rate of interest} \times \frac{\text{Average period}}{12} \\ &= ₹ 12,000 \times \frac{5}{100} \times \frac{6}{12} = ₹ 300 \end{aligned}$$

**(iii) If drawings are made at the end of every month:**

Average period = 5.5

$$\begin{aligned} \text{Interest on drawings} &= \text{Total amount of drawings} \times \text{Rate of interest} \times \frac{\text{Average period}}{12} \\ &= ₹ 12,000 \times \frac{5}{100} \times \frac{5.5}{12} = ₹ 275 \end{aligned}$$

### Illustration 17

Priya and Kavitha are partners. Priya draws ₹ 4,000 at the end of each quarter. Interest on drawings is chargeable at 6% p.a. Calculate interest on drawings for the year ending 31st December 2018 using average period.

#### Solution

Calculation of interest on drawings of Priya (using average period)

Total amount of drawings = 4,000 x 4 = ₹ 16,000

If drawings are made at the end of every quarter, average period = 4.5

$$\begin{aligned} \text{Interest on drawings} &= \text{Total amount of drawings} \times \text{Rate of interest} \times \frac{\text{Average period}}{12} \\ &= ₹ 16,000 \times \frac{6}{100} \times \frac{4.5}{12} = ₹ 360 \end{aligned}$$

### Illustration 18

Vennila and Eswari are partners. Vennila draws ₹ 5,000 at the beginning of each half year. Interest on drawings is chargeable at 4% p.a. Calculate interest on drawings for the year ending 31st December 2018 using average period.

#### Solution

Calculation of interest on drawings of Vennila (using average period)

Total amount of drawings = 5,000 x 2 = ₹ 10,000

If drawings are made at the end of every half year, average period = 9

$$\begin{aligned} \text{Interest on drawings} &= \text{Total amount of drawings} \times \text{Rate of interest} \times \frac{\text{Average period}}{12} \\ &= ₹ 10,000 \times \frac{4}{100} \times \frac{9}{12} = ₹ 300 \end{aligned}$$

### 3.8 Salary and commission to partners

In some firms, remuneration may be allowed to the partners in the form of salary or commission for the contribution of the partners to the firm in the form of sharing skill and expertise, managerial work done, etc. In such cases, it must be specifically mentioned in the partnership deed. The following are the journal entries to be passed in the books:

#### (a) For partners' salary and commission due

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Partner's salary A/c Dr.		xxx	
	Partner's commission A/c Dr.		xxx	
	To Partner's capital / current A/c			xxx

#### (b) For closing partners' salary and commission account at the end of the accounting year

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Profit and loss appropriation A/c Dr.		xxx	
	To Partner's salary A/c			xxx
	To Partner's commission A/c			xxx

**Tutorial note:** Partners are entitled to remuneration only if there is a profit in the firm. Hence, Profit and loss appropriation account is debited. As the remuneration is due to the partners, capital/current account of partners is credited.

Commission to partners may be allowed as a percentage of net profit before charging such commission or as a percentage of net profit after charging such commission. In such cases, commission is calculated as below:

#### (i) Commission as a percentage of net profit before charging such commission

$$= \text{Net profit before commission} \times \frac{\% \text{ of commission}}{100}$$

#### (ii) Commission as a percentage of net profit after charging such commission

$$= \text{Net profit before commission} \times \frac{\% \text{ of commission}}{100 + \% \text{ of commission}}$$

### Illustration 19

Syed, Samuel and Sudhakar are partners in a firm sharing profits and losses equally. As per the terms of the partnership deed, Samuel is allowed a monthly salary of ₹ 2,000 and Sudhakar is allowed a commission of ₹ 6,000 per annum for their contribution to the business of the firm. You are required to pass the necessary journal entry. Assume that their capitals are fluctuating.

### Solution

Salary to Samuel = 2,000 x 12 = ₹ 24,000

Commission to Sudhahar = ₹ 6,000

#### Journal entry

Date	Particulars	L.F.	Dr. ₹	Cr. ₹
	Samuel's salary A/c Dr. To Samuel's capital A/c (Samuel's salary transferred to his capital account)		24,000	24,000
	Sudhahar's commission A/c Dr. To Sudhahar's capital A/c (Sudhahar's commission transferred to his capital account)		6,000	6,000
	Profit and loss appropriation A/c Dr. To Saumel's salary A/c To Sudhahar's commission A/c (Salary and commission account transferred)		30,000	24,000 6,000

### Illustration 20

Murali and Sethu are partners in a firm. Murali is to get a commission of 10% of net profit before charging any commission. Sethu is to get a commission of 10% on net profit after charging all commission. Net profit for the year ended 31st March 2019 before charging any commission was ₹ 1,10,000. Find the amount of commission due to Murali and Sethu.

### Solution

#### Calculation of commission:

##### Commission to Murali:

$$\begin{aligned} &= \text{Net profit before commission} \times \frac{\% \text{ of commission}}{100} \\ &= 1,10,000 \times \frac{10}{100} = ₹ 11,000 \end{aligned}$$

##### Commission to Sethu:

Net profit after Murali's commission = 1,10,000 - 11,000 = ₹ 99,000

$$\begin{aligned} \text{Sethu's commission} &= \text{Net profit after Murali's commission} \times \frac{\% \text{ of commission}}{(100 + \% \text{ of commission})} \\ &= 99,000 \times \frac{10}{(100 + 10)} = ₹ 9,000 \end{aligned}$$



### 3.9 Interest on loan from partners

Sometimes, a partner may provide loan or advance to the firm. In such cases, partner's loan or advance account is to be separately maintained in the books. The partners are entitled to interest on the loan or advance at the rate agreed by them. If there is no such agreement, the partners are entitled to an interest at the rate of 6 per cent per annum [Section 13(d) of the Indian Partnership Act, 1932]. The following journal entries are to be made in the books of the firm:

#### (a) For providing interest on partner's loan

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Interest on partner's loan A/c Dr. To Partner's loan A/c		xxx	xxx

**Note:** Interest on partner's loan being an expense to the firm is debited in firm's books. Interest on loan is due to the partner and it is generally added to the loan amount due and hence partner's loan account is credited.

#### (b) For closing interest on partner's loan account

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Profit and loss A/c Dr. To Interest on partner's loan A/c		xxx	xxx

**Tutorial note:** Interest on partners' loan is a charge against profit, that is, whether there is profit or loss for the firm, this interest is to be provided. Hence, interest on partners' loan is transferred to profit and loss account.

### 3.10 Division of profits among partners

The net profit as per the profit and loss account of a firm is subject to the adjustment of interest on capital, interest on drawings, etc. These adjustments are made by preparing a profit and loss appropriation account. The resultant profit of the firm being the balance in the profit and loss appropriation account is to be divided among the partners according to their profit sharing ratio. In the absence of profit sharing ratio, profit is divided among the partners equally. The following is the journal entry to be passed in the books for the division of profit among the partners.

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Profit and loss appropriation A/c Dr. To Partner's capital/current A/c		xxx	xxx

**Note:** If there is a loss, the reverse entry is made.

### 3.11 Profit and loss appropriation account

The profit and loss appropriation account is an extension of profit and loss account prepared for the purpose of adjusting the transactions relating to amounts due to and amounts due from partners. It is nominal account in nature. It is credited with net profit, interest on drawings and it is debited with interest on capital, salary and other remuneration to the partners. The balance being the profit or loss is transferred to the partners' capital or current account in the profit sharing ratio.

#### 3.11.1 Format of Profit and loss appropriation account

The following is the format of profit and loss appropriation account:

Dr.		Profit and loss appropriation account		Cr.	
Particulars	₹	Particulars	₹		
To Interest on partners' capital A/c	xxx	By Profit and loss A/c *	xxx		
To Partners' salary A/c	xxx	By Interest on partners'			
To Partners' commission A/c	xxx	drawings A/c	xxx		
To Partners' capital/current A/c (Profit)	xxx				
	xxx				xxx

\*Amount of profit transferred from profit and loss account.

#### Illustration 21

Arulappan and Nallasamy are partners in a firm sharing profits and losses in the ratio of 4:1. On 1st January 2018, their capitals were ₹ 20,000 and ₹ 10,000 respectively. The partnership deed specifies the following:

- Interest on capital is to be allowed at 5% per annum.
- Interest on drawings charged to Arulappan and Nallasamy are ₹ 200 and ₹ 300 respectively.
- The net profit of the firm before considering interest on capital and interest on drawings amounted to ₹ 18,000.

Give necessary journal entries and prepare Profit and loss appropriation account for the year ending 31st December 2018. Assume that the capitals are fluctuating.

## Solution

### Journal entries

Date	Particulars	L.F.	Dr. ₹	Cr. ₹
2018 Dec. 31	Interest on capital A/c Dr. To Arulappan's capital A/c To Nallasamy's capital A/c (Interest on capital @ 5% provided)		1,500	1,000 500
„	Profit and loss appropriation A/c Dr. To Interest on capital A/c (Interest on capital account closed)		1,500	1,500
„	Arulappan's capital A/c Dr. Nallasamy's capital A/c Dr. To Interest on drawings A/c (Interest on drawings charged)		200 300	500
„	Interest on drawings A/c Dr. To Profit and loss appropriation A/c (Interest on drawings account closed)		500	500
„	Profit and loss appropriation A/c Dr. To Arulappan's capital A/c To Nallasamy's capital A/c (Profit transferred)		17,000	13,600 3,400

### Dr. Profit and loss appropriation account for the year ended 31st December 2018 Cr.

Particulars	₹	₹	Particulars	₹
To Interest on capital A/c:			By Profit and loss A/c	18,000
Arulappan		1,000	By Interest on drawings A/c	
Nallasamy		500	Arulappan	200
To Partners' capital A/c (profit)			Nallasamy	300
Arulappan (4/5)	13,600			
Nallasamy (1/5)	3,400	<b>17,000</b>		
		18,500		18,500

## Illustration 22

Durai and Velan entered into a partnership agreement on 1st April 2018, Durai contributing ₹ 25,000 and Velan ₹ 30,000 as capital. The agreement provided that:

- Profits and losses to be shared in the ratio 2:3 as between Durai and Velan.
- Partners to be entitled to interest on capital @ 5% p.a.
- Interest on drawings to be charged Durai: ₹ 300 Velan: ₹ 450
- Durai to receive a salary of ₹ 5,000 for the year, and
- Velan to receive a commission of ₹ 2,000

During the year, the firm made a profit of ₹ 20,000 before adjustment of interest, salary and commission. Prepare the Profit and loss appropriation account.

### Solution

**Dr. Profit and loss appropriation account for the year ended 31st March 2019 Cr.**

Particulars	₹	₹	Particulars	₹
To Interest on capital A/c:			By Profit and loss A/c	20,000
Durai (25,000 x 5%)		1,250	By Interest on drawings A/c	
Velan (30,000 x 5%)		1,500	Durai	300
To Salary to Durai A/c		5,000	Velan	450
To Commission to Velan A/c		2,000		
To Partners' capital A/c (profit transferred)				
Durai (11,000 x 2/5)	4,400			
Velan (11,000 x 3/5)	6,600	<b>11,000</b>		
		20,750		20,750

## Illustration 23

Richard and Rizwan started a business on 1st January 2018 with capitals of ₹ 3,00,000 and ₹ 2,00,000 respectively.

According to the Partnership Deed

- Interest on capital is to be provided @ 6% p.a.
- Rizwan is to get salary of ₹ 50,000 per annum.
- Richard is to get 10% commission on profit (after interest on capital and salary to Rizwan) after charging such commission.
- Profit-sharing ratio between the two partners is 3:2.

During the year, the firm earned a profit of ₹ 3,00,000.

Prepare profit and loss appropriation account. The firm closes its accounts on 31st December every year.

## Solution

### Dr. Profit and loss appropriation account for the year ended 31st December 2018 Cr.

Particulars	₹	₹	Particulars	₹
To Interest on capital A/c:			By Profit and loss A/c	3,00,000
Richard (3,00,000 x 6%)	18,000			
Rizwan (2,00,000 x 6%)	12,000	30,000		
To Salary to Rizwan		50,000		
To Commission to Richard		20,000		
To Partners' capital A/c (profit)				
Richard (3/5)	1,20,000			
Rizwan (2/5)	80,000	<b>2,00,000</b>		
		3,00,000		3,00,000

#### Note:

#### Calculation of commission:

Profit before commission = 3,00,000 – (50,000+30,000) = ₹ 2,20,000

$$\text{Commission} = \text{Net profit before commission} \times \frac{\text{Rate of commission}}{(100 + \text{Rate of commission})}$$

$$\text{Commission} = 2,20,000 \times \frac{10}{110} = ₹ 20,000$$



#### Limited Liability Partnership (LLP)

Limited Liability Partnership (LLP) is a type of partnership in which the liability of the partners is limited to the extent of their capital contribution.

It is a legal entity separate from that of its partners. It is formed as per the provisions of The Limited Liability Partnership Act, 2008. It has perpetual succession. Any change in the partners of LLP shall not affect the existence, rights or liabilities of LLP. Provisions of the Partnership Act, 1932 will not apply to a Limited Liability Partnership. An individual or a body corporate can become a partner. Partners are not personally liable for the obligations of the partnership unless the obligations arise due to their own wrongful acts or omissions.

### Points to remember

- ❖ Profits and losses are shared among the partners of a firm in the profit sharing ratio. In the absence of agreed ratio, the profits and losses are to be shared by the partners equally.
- ❖ In the absence of agreement, no interest is allowed on capital, no interest is charged on drawings and no salary or other remuneration is given to the partners.
- ❖ Partners are entitled to interest on the loans advanced by them to the firm at a rate agreed by them. If the rate of interest on partners' loan is not agreed, the partners are entitled to interest on loans at 6% per annum.
- ❖ When fixed capital method is adopted by a firm, current accounts are opened for each partner apart from the capital account of each partner.
- ❖ When fluctuating capital method is followed, all the adjustments regarding additional capital introduced, share of profit, interest on capital, interest on drawings, etc. are done in the capital account.
- ❖ In Profit and loss appropriation account, adjustments are made for interest on capital, interest on drawings and partners' remuneration, the resultant profit is shared by the partners in their profit sharing ratio.

### Self-examination questions

#### I Multiple choice questions

##### Choose the correct answer



1. In the absence of a partnership deed, profits of the firm will be shared by the partners in
  - (a) Equal ratio
  - (b) Capital ratio
  - (c) Both (a) and (b)
  - (d) None of these
2. In the absence of an agreement among the partners, interest on capital is
  - (a) Not allowed
  - (b) Allowed at bank rate
  - (c) Allowed @ 5% per annum
  - (d) Allowed @ 6% per annum
3. As per the Indian Partnership Act, 1932, the rate of interest allowed on loans advanced by partners is
  - (a) 8% per annum
  - (b) 12% per annum
  - (c) 5% per annum
  - (d) 6% per annum
4. Which of the following is shown in Profit and loss appropriation account?
  - (a) Office expenses
  - (b) Salary of staff
  - (c) Partners' salary
  - (d) Interest on bank loan
5. When fixed capital method is adopted by a partnership firm, which of the following items will appear in capital account?
  - (a) Additional capital introduced
  - (b) Interest on capital
  - (c) Interest on drawings
  - (d) Share of profit

6. When a partner withdraws regularly a fixed sum of money at the middle of every month, period for which interest is to be calculated on the drawings on an average is
- (a) 5.5 months (b) 6 months  
(c) 12 months (d) 6.5 months
7. Which of the following is the incorrect pair?
- (a) Interest on drawings – Debited to capital account  
(b) Interest on capital – Credited to capital account  
(c) Interest on loan – Debited to capital account  
(d) Share of profit – Credited to capital account
8. In the absence of an agreement, partners are entitled to
- (a) Salary (b) Commission  
(c) Interest on loan (d) Interest on capital
9. Pick the odd one out
- (a) Partners share profits and losses equally  
(b) Interest on partners' capital is allowed at 7% per annum  
(c) No salary or remuneration is allowed to partners  
(d) Interest on loan from partners is allowed at 6% per annum.
10. Profit after interest on drawings, interest on capital and remuneration is ₹ 10,500. Geetha, a partner, is entitled to receive commission @ 5% on profits after charging such commission. Find out commission.
- (a) ₹ 50 (b) ₹ 150  
(c) ₹ 550 (d) ₹ 500

### Answers

1 (a)	2(a)	3(d)	4(c)	5 (a)	6(b)	7(c)	8(c)	9(b)	10(d)
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### II Very short answer questions

1. Define partnership.
2. What is a partnership deed?
3. What is meant by fixed capital method?
4. What is the journal entry to be passed for providing interest on capital to a partner?
5. Why is Profit and loss appropriation account prepared?

### III Short answer questions

1. State the features of partnership.
2. State any six contents of a partnership deed.
3. State the differences between fixed capital method and fluctuating capital method.

4. Write a brief note on the applications of the provisions of the Indian Partnership Act, 1932 in the absence of partnership deed.
5. Jayaraman is a partner who withdrew ₹ 10,000 regularly in the middle of every month. Interest is charged on the drawings at 6% per annum. Calculate interest on drawings for the year ended 31st December, 2018.

(Ans: Interest on drawings: ₹ 3,600)

#### IV Exercises

1. Akash, Bala, Chandru and Daniel are partners in a firm. There is no partnership deed. How will you deal with the following?
  - (i) Akash has contributed maximum capital. He demands interest on capital at 10% per annum.
  - (ii) Bala has withdrawn ₹ 3,000 per month. Other partners ask Bala to pay interest on drawings @ 8% per annum to the firm. But, Bala did not agree to it.
  - (iii) Akash demands the profit to be shared in the capital ratio. But, others do not agree.
  - (iv) Daniel demands salary at the rate of ₹ 10,000 per month as he spends full time for the business.
  - (v) Loan advanced by Chandru to the firm is ₹ 50,000. He demands interest on loan @ 12% per annum.

**(Answer: (i) No interest on capital is payable to any partner**  
**(ii) No interest is chargeable on drawings made by the partner**  
**(iii) Profits should be distributed equally (iv) No remuneration is payable**  
**to any partner (v) Interest on loan is payable at 6% per annum)**

2. From the following information, prepare capital accounts of partners Rooban and Deri, when their capitals are fixed.

Particulars	Rooban ₹	Deri ₹
Capital on 1 <sup>st</sup> April, 2018	70,000	50,000
Current account on 1 <sup>st</sup> April, 2018 (Cr.)	25,000	15,000
Additional capital introduced	18,000	16,000
Drawings during 2018 – 2019	10,000	6,000
Interest on drawings	500	300
Share of profit for 2018 – 2019	35,000	25,800
Interest on capital	3,500	2,500
Salary	Nil	18,000
Commission	12,000	Nil

**(Answer: Capital account balance: Rooban: ₹ 88,000 (Cr.); Deri: ₹ 66,000 (Cr.)**  
**Current account balance: Rooban: ₹ 65,000 (Cr.); Deri: ₹ 55,000 (Cr.)**



3. Arun and Selvam are partners who maintain their capital accounts under fixed capital method. From the following particulars, prepare capital accounts of partners.

Particulars	Arun ₹	Selvam ₹
Capital on 1 <sup>st</sup> January, 2018	2,20,000	1,50,000
Current account on 1 <sup>st</sup> January, 2018	4,250(Dr.)	10,000(Cr.)
Additional capital introduced during the year	Nil	70,000
Withdrew for personal use	10,000	20,000
Interest on drawings	750	600
Share of profit for 2018	22,000	15,000
Interest on capital	1,100	750
Commission	6,900	Nil
Salary	Nil	6,850

(Answer: Capital account balance: Arun: ₹ 2,20,000 (Cr.); Selvam: ₹ 2,20,000 (Cr.)

Current account balance: Arun: ₹ 15,000 (Cr.); Selvam: ₹ 12,000 (Cr.)

4. From the following information, prepare capital accounts of partners Padmini and Padma, when their capitals are fluctuating.

Particulars	Padmini ₹	Padma ₹
Capital on 1 <sup>st</sup> January 2018 (Cr. balance)	5,00,000	4,00,000
Drawings during 2018	70,000	40,000
Interest on drawings	2,000	1,000
Share of profit for 2018	52,000	40,000
Interest on capital	30,000	24,000
Salary	45,000	Nil
Commission	Nil	21,000

(Answer: Capital account balance: Padmini: ₹ 5,55,000 (Cr.); Padma: ₹ 4,44,000 (Cr.)

5. Mannan and Ramesh share profits and losses in the ratio of 3:2 and their capital on 1st April, 2018 was Mannan ₹ 1,50,000 and Ramesh ₹ 1,00,000 respectively and their current accounts show a credit balance of ₹ 25,000 and ₹ 20,000 respectively. Calculate interest on capital at 6% p.a. for the year ending 31st March, 2019 and show the journal entries.

(Answer: Interest on capital: Mannan: ₹ 9,000; Ramesh: ₹ 6,000)

6. Prakash and Supria were partners who share profits and losses in the ratio of 5:3. Balance in their capital account on 1st April, 2018 was Prakash ₹ 3,00,000 and Supria ₹ 2,00,000. On 1st July, 2018 Prakash introduced additional capital of ₹ 60,000. Supria introduced additional capital of ₹ 30,000 during the year. Calculate interest on capital at 6% p.a. for the year ending 31st March, 2019 and show the journal entries.

(Answer: Interest on capital: Prakash: ₹ 20,700; Supria: ₹ 12,900)

7. The capital account of Begum and Fatima on 1st January, 2018 showed a balance of ₹ 50,000 and ₹ 40,000 respectively. On 1st October, 2018, Begum introduced an additional capital of ₹ 10,000 and on 1st May, 2018 Fatima introduced an additional capital of ₹ 9,000.

Calculate interest on capital at 4% p.a. for the year ending 31st December, 2018.

(Answer: Interest on capital: Begum: ₹ 2,100; Fatima: ₹ 1,840)

8. From the following balance sheets of Subha and Sudha who share profits and losses in 2:3, calculate interest on capital at 5% p.a. for the year ending 31st December, 2018.

**Balance sheet as on 31st December, 2018**

Liabilities	₹	₹	Assets	₹
Capital accounts:			Fixed assets	70,000
Subha	40,000		Current assets	50,000
Sudha	60,000	1,00,000		
Current liabilities		20,000		
		1,20,000		1,20,000

Drawings of Subha and Sudha during the year were ₹ 8,000 and ₹ 10,000 respectively. Profit earned during the year was ₹ 30,000.

(Answer: Interest on capital: Subha: ₹ 1,800; Sudha: ₹ 2,600)

9. From the following balance sheets of Rajan and Devan who share profits and losses 2:1, calculate interest on capital at 6% p.a. for the year ending 31st December, 2018.

**Balance sheet as on 31st December, 2018**

Liabilities	₹	₹	Assets	₹
Capital accounts:			Sundry assets	2,20,000
Rajan	1,00,000			
Devan	80,000	1,80,000		
Profit and loss appropriation A/c		40,000		
		2,20,000		2,20,000

On 1st April, 2018, Rajan introduced an additional capital of ₹ 40,000 and on 1st September, 2018, Devan introduced ₹ 30,000. Drawings of Rajan and Devan during the year were ₹ 20,000 and ₹ 10,000 respectively. Profit earned during the year was ₹ 70,000.

**(Answer: Interest on capital: Rajan: ₹ 5,400; Devan: ₹ 3,600)**

10. Ahamad and Basheer contribute ₹ 60,000 and ₹ 40,000 respectively as capital. Their respective share of profit is 2:1 and the profit before interest on capital for the year is ₹ 5,000. Compute the amount of interest on capital in each of the following situations:

- (i) if the partnership deed is silent as to the interest on capital
- (ii) if interest on capital @ 4% is allowed as per the partnership deed
- (iii) if the partnership deed allows interest on capital @ 6% per annum.

**(Answer: (i) No interest on capital is allowed**

**(ii) Since there is sufficient profit, interest on capital will be provided.**

**Ahamad: ₹ 2,400; Basheer: ₹ 1,600;**

**(iii) Since the profit is insufficient, interest on capital will not be provided.**

**Profit of ₹ 5,000 will be distributed to the partners in their capital ratio of 3:2.)**

11. Mani is a partner, who withdrew ₹ 30,000 on 1st September, 2018. Interest on drawings is charged at 6% per annum. Calculate interest on drawings on 31st December, 2018 and show the journal entries by assuming that fluctuating capital method is followed.

**(Answer: Interest on drawings of Mani: ₹ 600)**

12. Santhosh is a partner in a partnership firm. As per the partnership deed, interest on drawings is charged at 6% per annum. During the year ended 31st December, 2018 he withdrew as follows:

Date	₹
February 1	2,000
May 1	10,000
July 1	4,000
October 1	6,000

Calculate the amount of interest on drawings.

**(Answer: Interest on drawings of Santhosh: ₹ 720)**

13. Kumar is a partner in a partnership firm. As per the partnership deed, interest on drawings is charged at 6% per annum. During the year ended 31st December, 2018 he withdrew as follows:

Date	₹
March 1	4,000
June 1	4,000
September 1	4,000
December 1	4,000

Calculate the amount of interest on drawings.

**(Answer: Interest on drawings of Kumar: ₹ 440)**

14. Mathew is a partner who withdrew ₹ 20,000 during the year 2018. Interest on drawings is charged at 10% per annum. Calculate interest on drawings on 31st December 2018.

**(Answer: Interest on drawings of Mathew: ₹ 1,000)**

15. Santhosh is a partner in a partnership firm. As per the partnership deed, interest on drawings is charged at 6% per annum. During the year ended 31st December, 2018 he withdrew as follows:

Date	₹
February 1	2,000
May 1	10,000
July 1	4,000
October 1	6,000

Calculate the amount of interest on drawings by using product method.

**(Answer: Interest on drawings of Santhosh: ₹ 720)**

16. Kavitha is a partner in a firm. She withdraws ₹ 2,500 p.m. regularly. Interest on drawings is charged @ 4% p.a. Calculate the interest on drawings using average period, if she draws

- (i) at the beginning of every month
- (ii) in the middle of every month
- (iii) at the end of every month

**(Answer: Interest on drawings of Kavitha: (i) ₹ 650 (ii) ₹ 600 (iii) ₹ 550)**

17. Kevin and Francis are partners. Kevin draws ₹ 5,000 at the end of each quarter. Interest on drawings is chargeable at 6% p.a. Calculate interest on drawings for the year ending 31st March 2019 using average period.

**(Answer: Interest on drawings of Kevin: ₹ 450)**

18. Ram and Shyam were partners. Ram withdrew ₹ 18,000 at the beginning of each half year. Interest on drawings is chargeable @ 10% p.a. Calculate interest on the drawings for the year ending 31st December 2018 using average period.

**(Answer: Interest on drawings of Ram: ₹ 2,700)**

19. Janani, Kamali and Lakshmi are partners in a firm sharing profits and losses equally. As per the terms of the partnership deed, Kamali is allowed a monthly salary of ₹ 10,000 and Lakshmi is allowed a commission of ₹ 40,000 per annum for their contribution to the business of the firm. You are required to pass the necessary journal entry. Assume that their capitals are fluctuating.

20. Sibi and Manoj are partners in a firm. Sibi is to get a commission of 20% of net profit before charging any commission. Manoj is to get a commission of 20% on net profit after

charging all commission. Net profit for the year ended 31st December 2018 before charging any commission was ₹ 60,000. Find the commission of Sibi and Manoj. Also show the distribution of profit.

**(Answer: Commission to Sibi: ₹ 12,000; Commission to Manoj: ₹ 8,000  
Share of profit: Sibi: ₹ 20,000; Manoj: ₹ 20,000)**

21. Anand and Narayanan are partners in a firm sharing profits and losses in the ratio of 5:3. On 1st January 2018, their capitals were ₹ 50,000 and ₹ 30,000 respectively. The partnership deed specifies the following:

- Interest on capital is to be allowed at 6% per annum.
- Interest on drawings charged to Anand and Narayanan are ₹ 1,000 and ₹ 800 respectively.
- The net profit of the firm before considering interest on capital and interest on drawings amounted to ₹ 35,000.

Give necessary journal entries and prepare profit and loss appropriation account as on 31st December 2018. Assume that the capitals are fluctuating.

**(Answer: Share of profit: Anand: ₹ 20,000; Narayanan: ₹ 12,000)**

22. Dinesh and Sugumar entered into a partnership agreement on 1st January 2018, Dinesh contributing ₹ 1,50,000 and Sugumar ₹ 1,20,000 as capital. The agreement provided that:

- Profits and losses to be shared in the ratio 2:1 as between Dinesh and Sugumar.
- Partners to be entitled to interest on capital @ 4% p.a.
- Interest on drawings to be charged Dinesh: ₹ 3,600 and Sugumar: ₹ 2,200
- Dinesh to receive a salary of ₹ 60,000 for the year, and
- Sugumar to receive a commission of ₹ 80,000

During the year ended on 31st December 2018, the firm made a profit of ₹ 2,20,000 before adjustment of interest, salary and commission.

Prepare the Profit and loss appropriation account.

**(Answer: Share of profit: Dinesh: ₹ 50,000; Sugumar: ₹ 25,000)**

23. Antony and Ranjith started a business on 1st April 2018 with capitals of ₹ 4,00,000 and ₹ 3,00,000 respectively. According to the Partnership Deed, Antony is to get salary of ₹ 90,000 per annum, Ranjith is to get 25% commission on profit after allowing salary to Antony and interest on capital @ 5% p.a. but after charging such commission. Profit-sharing ratio between the two partners is 1:1. During the year, the firm earned a profit of ₹ 3,65,000.

Prepare profit and loss appropriation account. The firm closes its accounts on 31st March every year.

**(Answer: Commission to Ranjith: ₹ 48,000; Share of profit: Antony: ₹ 96,000;  
Ranjith: ₹ 96,000)**

  
**CASE STUDY**

Malar and Mani are good friends and wanted to start a business of buying and selling of sports materials. So, they formed a partnership firm. They contributed equal amount of capital. Apart from the capital, Mani gave loan to the business. However, there was no partnership deed. Malar is good at marketing and adds value to the business with her skills. The firm maintains two separate accounts- capital and current accounts. The business gained popularity and reputation. But, the business could not cover its expenses and hence made a loss. At the end of the first year of the business, they had some misunderstanding on the following:

- 1) Malar claims salary of ₹ 10,000 per month, for her extra efforts. Mani does not agree to this.
- 2) Mani claims interest on the loan. But, Malar does not agree for this saying that the business made a loss.
- 3) Mani wants to admit his relative into the existing firm, but Malar does not agree for this.

They both need your help to solve these issues.

**To explore further**

A business has gained good reputation. Can this be valued in terms of money and be recorded in the books of accounts?

**Reference**

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# UNIT 4

## GOODWILL IN PARTNERSHIP ACCOUNTS



### Contents

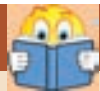
- 4.1 Introduction
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- 4.3 Factors determining the value of goodwill of a partnership firm
- 4.4 Need for valuation of goodwill of partnership firms
- 4.5 Classification of goodwill
- 4.6 Methods of valuation of goodwill



### Points to recall

The following points are to be recalled before learning goodwill in partnership accounts:

- ◇ Meaning and features of partnership firm
- ◇ Meaning of intangible assets



### Learning objectives

To enable the students to

- ◇ Understand the need for valuation of goodwill in partnership firm and factors that determine the value of goodwill
- ◇ Understand the different methods of valuation of goodwill

### Key terms to know

- ◇ Goodwill
- ◇ Average profit
- ◇ Normal profit
- ◇ Super profit



## 4.1 Introduction



### Student activity 4.1

Ravi has a fruit shop for 10 years in a busy area. The shop is a rented property. He has gained loyal customers for his shop. The business has been consistently performing well and making good profit. Now, Ravi considers moving to a different city to open a big supermarket. He has cleared all his debts to outsiders. His friend, Raja is planning to buy Ravi's business by taking over all the unsold fruits, to continue the business. Ravi is asking for ₹ 1,00,000 to sell his business. But, Raja thinks the cost of inventory that Ravi holds now may be worth only ₹ 5,000. So, he is hesitant to buy the business. What is your advice to Raja. Why do you think that Ravi quotes more than the worth of the asset he holds?

Goodwill is the good name or reputation of the business which brings benefit to the business. It enables the business to earn more profit. It is the present value of a firm's future excess earnings. It is an intangible asset as it has no physical existence. It is shown under fixed assets in the balance sheet.

An old and well established business entity develops a good name and reputation among the public over a period of time, because of various reasons such as good quality of goods and services, location of the business, etc. This enables the business to earn more profit compared to a new business. The monetary value of such advantage is termed as goodwill.

## 4.2 Nature of goodwill

The nature of goodwill can be described as follows:

- (i) Goodwill is an intangible fixed asset. It is intangible because it has no physical existence. It cannot be seen or touched.
- (ii) It has a definite value depending on the profitability of the business enterprise.
- (iii) It cannot be separated from the business.
- (iv) It helps in earning more profit and attracts more customers.
- (v) It can be purchased or sold only when the business is purchased or sold in full or in part.



### Student activity 4.2

Interview a partner. Discuss with him/her to know the factors that have contributed to the firm's goodwill. Present your findings to the whole class.



### 4.3 Factors determining the value of goodwill of a partnership firm

Generally, the following factors determine the value of goodwill of a partnership firm:

#### (i) Profitability of the firm

The profit earning capacity of the firm determines the value of its goodwill. A firm earning higher profits and having potential to generate higher profits in future will have higher value of goodwill.

#### (ii) Favourable location of the business enterprise

If the firm is located in a prominent place which is easily accessible to the customers, it can attract more customers. Its sales and profit will be higher when compared to a firm which is not located in a prominent place. Hence, it will have high value of goodwill.

#### (iii) Good quality of goods or services offered

If a firm enjoys good reputation among the customers and general public for the good quality of its products or services, the value of goodwill for the firm will be high.

#### (iv) Tenure of the business enterprise

A firm which has carried on business for several years will have higher reputation among its customers as it is better known to the customers. Such a firm will have higher earnings and higher value of goodwill when compared to a new firm.

#### (v) Efficiency of management

A firm having efficient management will earn more profits and the value of its goodwill will be higher compared to a firm with less efficient managerial personnel.

#### (vi) Degree of competition

In the case of business enterprises having no competition or negligible competition, the value of goodwill will be high.

#### (vii) Other factors

There are other factors which add to the value of goodwill of a business such as popularity of the proprietor, impressive advertisements and publicity, good relations with customers, etc.



#### Student activity 4.3

Collect the logos of any five businesses and ask your friend to identify the name of the business.

### 4.4 Need for valuation of goodwill of partnership firms

In case of partnership firms, whenever there is a change in the mutual rights of partners, the need for valuation of goodwill arises. Following are the circumstances that require valuation of goodwill of partnership firms in order to protect the rights of the partners:

- (i) When there is a change in the profit sharing ratio
- (ii) When a new partner is admitted into a firm
- (iii) When an existing partner retires from the firm or when a partner dies
- (iv) When a partnership firm is dissolved

#### 4.5 Classification of goodwill

Goodwill may be classified into acquired goodwill and self-generated goodwill.

##### (i) Acquired or purchased goodwill

Goodwill acquired by making payment in cash or kind is called acquired or purchased goodwill. When a firm purchases an existing business, the price paid for purchase of such business may exceed the net assets (Assets – Liabilities) of the business acquired. The excess of purchase consideration over the value of net assets acquired is treated as acquired goodwill. The Indian Accounting Standard 10 (AS10) on accounting for fixed assets states that goodwill must be recorded in the books of accounts only when some consideration in money or money's worth has been paid for it. Therefore, acquired goodwill can be recorded in the books of accounts and is shown on the assets side of the balance sheet under fixed assets.

##### (ii) Self-generated goodwill

It is the goodwill which is self generated by a firm based on features of the business such as favourable location, loyal customers, etc. Such self-generated goodwill cannot be recorded in the books of accounts.

#### 4.6 Methods of valuation of goodwill

Following are the methods generally followed to value goodwill:

##### 4.6.1 Average profit method

Under this method, goodwill is calculated as certain years of purchase of average profits of the past few years. The number of years of purchase is generally determined on the basis of the average period a new business will take in order to bring it to the current state of the existing business. It may also be determined on the basis of the number of years for which the past average profit will be earned in future.

While computing the average profit, in addition to rectification of errors, the following adjustments are to be made:

Adjusted profit = Actual profit

- + Past expenses not required in the future
- Past revenues not likely to be earned in the future
- + Additional income expected in the future
- Additional expenses expected to be paid in the future

The average profit may be either simple average profit or weighted average profit.

### (a) Simple average profit method

Under this method, goodwill is calculated by multiplying the average profits by a certain number of years of purchase. Simple average profit is calculated by adding the adjusted profits of certain number of years by dividing the total number of such years.

Goodwill = Average profit × Number of years of purchase

$$\text{Average profit} = \frac{\text{Total profit}}{\text{Number of years}}$$

#### Illustration 1

The following are the profits of a firm in the last five years:

2014: ₹ 4,000; 2015: ₹ 3,000; 2016: ₹ 5,000; 2017: ₹ 4,500 and 2018: ₹ 3,500

Calculate the value of goodwill at 3 years purchase of average profits of five years.

#### Solution

Goodwill = Average profit × Number of years of purchase

$$\begin{aligned}\text{Average profit} &= \frac{\text{Total profit}}{\text{Number of years}} \\ &= \frac{4,000 + 3,000 + 5,000 + 4,500 + 3,500}{5} \\ &= \frac{20,000}{5} = ₹ 4,000\end{aligned}$$

Goodwill = Average profit × Number of years of purchase  
= 4,000 × 3 = ₹ 12,000

#### Illustration 2

The profits and losses of a firm for the last four years were as follows:

2015: ₹ 15,000; 2016: ₹ 17,000; 2017: ₹ 6,000 (Loss); 2018: ₹ 14,000

You are required to calculate the amount of goodwill on the basis of 5 years purchase of average profits of the last 4 years.

#### Solution

Goodwill = Average profit × Number of years of purchase

$$\begin{aligned}\text{Average profit} &= \frac{\text{Total profit}}{\text{Number of years}} \\ \text{Average profit} &= \frac{15,000 + 17,000 - 6,000 + 14,000}{4} \\ &= \frac{40,000}{4} = ₹ 10,000\end{aligned}$$

Goodwill = Average profit × Number of years of purchase  
= 10,000 × 5 = ₹ 50,000

### Illustration 3

A partnership firm has decided to value its goodwill for the purpose of settling a retiring partner. The profits of that firm for the last four years were as follows:

2015: ₹ 40,000; 2016: ₹ 50,000; 2017: ₹ 48,000 and 2018: ₹ 46,000

The business was looked after by a partner. No remuneration was paid to him. The fair remuneration of the partner valued at comes to ₹ 6,000 per annum.

Find out the value of goodwill, if it is valued on the basis of three years purchase of the average profits of the last four years.

### Solution

$$\begin{aligned}\text{Average profit} &= \frac{\text{Total profit}}{\text{Number of years}} \\ &= \frac{40,000 + 50,000 + 48,000 + 46,000}{4} \\ &= \frac{1,84,000}{4} = ₹ 46,000\end{aligned}$$

Average profit before adjusting fair remuneration of the partner	₹ 46,000
Less: Fair remuneration of partners	<u>6,000</u>
Average profit	<u>40,000</u>
Goodwill = Average profit × Number of years of purchase	
= 40,000 × 3 = ₹ 1,20,000	

### Illustration 4

From the following information relating to Arul enterprises, calculate the value of goodwill on the basis of 2 years purchase of the average profits of 3 years.

- Profits for the years ending 31st December 2016, 2017 and 2018 were ₹ 46,000, ₹ 44,000 and ₹ 50,000 respectively.
- A non-recurring income of ₹ 5,000 is included in the profits of the year 2016.
- The closing stock of the year 2017 was overvalued by ₹ 10,000.

### Solution

#### Calculation of adjusted profit

Particulars	2016 ₹	2017 ₹	2018 ₹
Profit	46,000	44,000	50,000
Less: Non- recurring income	5,000	-	-
	41,000	44,000	50,000
Less: Over valuation of closing stock	-	10,000	-
	41,000	34,000	50,000
Add: Over valuation of opening stock	-	-	10,000
Profit after adjustments	41,000	34,000	60,000

**Tutorial note:** Over valuation of closing stock in 2017 will result in over valuation of opening stock in 2018

$$\begin{aligned} \text{Average profit} &= \frac{\text{Total profit}}{\text{Number of years}} \\ &= \frac{41,000 + 34,000 + 60,000}{3} \\ &= \frac{1,35,000}{3} = ₹ 45,000 \end{aligned}$$

$$\begin{aligned} \text{Goodwill} &= \text{Average profit} \times \text{Number of years of purchase} \\ &= 45,000 \times 2 = ₹ 90,000 \end{aligned}$$

### Illustration 5

The following particulars are available in respect of a business carried on by a partnership firm:

- Profits earned: 2016: ₹ 30,000; 2017: ₹ 29,000 and 2018: ₹ 32,000.
- Profit of 2016 includes a non-recurring income of ₹ 3,000.
- Profit of 2017 is reduced by ₹ 2,000 due to stock destroyed by fire.
- The stock is not insured. But, it is decided to insure the stock in future. The insurance premium is estimated at ₹ 5,600 per annum.

You are required to calculate the value of goodwill on the basis of 2 years purchase of average profits of the last three years.

### Solution

#### Calculation of adjusted profit

Particulars	2016 ₹	2017 ₹	2018 ₹
Profit	30,000	29,000	32,000
Less: Non- recurring income	3,000	-	-
	27,000	29,000	32,000
Add: Stock destroyed by fire (abnormal loss)	-	2,000	-
Profit after adjustments	27,000	31,000	32,000

$$\text{Average profit} = \frac{\text{Total profit}}{\text{Number of years}}$$

$$\begin{aligned} \text{Average profit} &= \frac{27,000 + 31,000 + 32,000}{3} \\ &= \frac{90,000}{3} = ₹ 30,000 \end{aligned}$$

Particulars	₹
Average profit before adjusting insurance premium payable in future	30,000
Less: Insurance premium payable in future	5,600
Average profit	24,400

$$\begin{aligned} \text{Goodwill} &= \text{Average profit} \times \text{Number of years of purchase} \\ &= 24,400 \times 2 \\ &= ₹ 48,800 \end{aligned}$$

### (b) Weighted average profit method

Under this method, goodwill is calculated by multiplying the weighted average profit by a certain number of years of purchase.

$$\text{Goodwill} = \text{Weighted average profit} \times \text{Number of years of purchase}$$

In this method, weights are assigned to each year's profit. Weighted profit is ascertained by multiplying the weights assigned with the respective year's profit. The sum of the weighted profits is divided by the sum of weights assigned to determine the weighted average profit.

$$\text{Weighted average profit} = \frac{\text{Total of weighted profits}}{\text{Total of weights}}$$

This method is used when the profits show an increasing or decreasing trend. More weight is generally given to the profits of the recent years.

### Illustration 6

For the purpose of admitting a new partner, a firm has decided to value its goodwill at 3 years purchase of the average profit of the last 4 years using weighted average method. Profits of the past 4 years and the respective weights are as follows:

Particulars	2015	2016	2017	2018
Profit (₹)	20,000	22,000	24,000	28,000
Weight	1	2	3	4

Compute the value of goodwill.

### Solution

#### Calculation of weighted average profit

Year	Profits (a) ₹	Weights (b)	Weighted profits (a × b) ₹
2015	20,000	1	20,000
2016	22,000	2	44,000
2017	24,000	3	72,000
2018	28,000	4	1,12,000
<b>Total</b>		10	2,48,000

$$\begin{aligned}\text{Weighted average profit} &= \frac{\text{Total of weighted profits}}{\text{Total of weights}} \\ &= \frac{2,48,000}{10} = ₹ 24,800\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Weighted average profit} \times \text{Number of years of purchase} \\ &= 24,800 \times 3 = ₹ 74,400\end{aligned}$$

#### 4.6.2 Super profit methods

Under these methods, super profit is the base for calculation of the value of goodwill. Super profit is the excess of average profit over the normal profit of a business.

$$\text{Super profit} = \text{Average profit} - \text{Normal profit}$$

Average profit is calculated by dividing the total of adjusted actual profits of certain number of years by the total number of such years. Normal profit is the profit earned by the similar business firms under normal conditions.

$$\text{Normal profit} = \text{Capital employed} \times \text{Normal rate of return}$$

$$\text{Capital employed} = \text{Fixed assets} + \text{Current assets} - \text{Current liabilities}$$

Normal rate of return = It is the rate at which profit is earned by similar business entities in the industry under normal circumstances.

##### (a) Purchase of super profit method

Under this method, goodwill is calculated by multiplying the super profit by a certain number of years of purchase.

$$\text{Goodwill} = \text{Super profit} \times \text{Number of years of purchase}$$

#### Illustration 7

From the following information, calculate the value of goodwill based on 3 years purchase of super profit

- (i) Capital employed: ₹ 2,00,000
- (ii) Normal rate of return: 15%
- (ii) Average profit of the business: ₹ 42,000

#### Solution

$$\begin{aligned}\text{Normal profit} &= \text{Capital employed} \times \text{Normal rate of return} \\ &= 2,00,000 \times 15\% = ₹ 30,000\end{aligned}$$

$$\begin{aligned}\text{Super profit} &= \text{Average profit} - \text{Normal profit} \\ &= 42,000 - 30,000 \\ &= ₹ 12,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Super profit} \times \text{Number of years of purchase} \\ &= 12,000 \times 3 \\ &= ₹ 36,000\end{aligned}$$

### Illustration 8

Calculate the value of goodwill at 5 years purchase of super profit from the following information:

(a) Capital employed: ₹ 1,20,000

(b) Normal rate of profit: 20%

(c) Net profit for 5 years:

2014: ₹ 30,000; 2015: ₹ 32,000; 2016: ₹ 35,000; 2017: ₹ 37,000 and 2018: ₹ 40,000

(d) Fair remuneration to the partners ₹ 2,800 per annum.

### Solution

$$\text{Average profit} = \frac{\text{Total profit}}{\text{Number of years}}$$

$$\text{Average profit} = \frac{30,000 + 32,000 + 35,000 + 37,000 + 40,000}{5}$$

$$\text{Average profit} = \frac{1,74,000}{5} = ₹ 34,800$$

Particulars	₹
Average profit before fair remuneration to the partners	34,800
Less: Fair remuneration to the partners	2,800
Average profit	32,000

$$\begin{aligned}\text{Normal profit} &= \text{Capital employed} \times \text{Normal rate of return} \\ &= 1,20,000 \times 20\% \\ &= ₹ 24,000\end{aligned}$$

$$\begin{aligned}\text{Super profit} &= \text{Average profit} - \text{Normal profit} \\ &= 32,000 - 24,000 \\ &= ₹ 8,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Super profit} \times \text{Number of years of purchase} \\ &= 8,000 \times 5 \\ &= ₹ 40,000\end{aligned}$$

### (b) Annuity method

Under this method, value of goodwill is calculated by multiplying the super profit with the present value of annuity.

$$\text{Goodwill} = \text{Super profit} \times \text{Present value annuity factor}$$

Present value annuity factor is the present value of annuity of rupee one at a given time. It can be found out from annuity table or by using formula.





Annuity refers to series of uniform cash flows at regular intervals. The table value gives the present value of annuity of rupee one received at the end of every year for a specified number of years.

The following formula is used to compute annuity factor:

$$\text{Annuity factor} = \frac{(1 + i)^n - 1}{i(1 + i)^n}$$

where,  $i$  = interest rate

$n$  = estimated number of years

### Illustration 9

From the following information, compute the value of goodwill as per annuity method:

- (a) Capital employed: ₹ 50,000
- (b) Normal rate of return: 10%
- (c) Profits of the years 2016, 2017 and 2018 were ₹ 13,000, ₹ 15,000 and ₹ 17,000 respectively.
- (d) The present value of annuity of ₹ 1 for 3 years at 10% is ₹ 2.4868.

### Solution

$$\begin{aligned}\text{Average profit} &= \frac{\text{Total profit}}{\text{Number of years}} \\ &= \frac{13,000 + 15,000 + 17,000}{3} \\ &= \frac{45,000}{3} \\ &= ₹ 15,000\end{aligned}$$

$$\begin{aligned}\text{Normal profit} &= \text{Capital employed} \times \text{Normal rate of return} \\ &= 50,000 \times 10\% \\ &= ₹ 5,000\end{aligned}$$

$$\begin{aligned}\text{Super profit} &= \text{Average profit} - \text{Normal profit} \\ &= 15,000 - 5,000 \\ &= ₹ 10,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Super profit} \times \text{Value of annuity} \\ &= 10,000 \times 2.4868 = ₹ 24,868\end{aligned}$$

### (c) Capitalisation of super profit method

Under this method, value of goodwill is calculated by capitalising the super profit at normal rate of return, that is, goodwill is the capitalised value of super profit.

$$\text{Goodwill} = \frac{\text{Super profit}}{\text{Normal rate of return}} \times 100$$

### Illustration 10

From the following information, compute the value of goodwill by capitalising super profit:

- (a) Capital employed is ₹ 4,00,000
- (b) Normal rate of return is 10%
- (c) Profit for 2016: ₹ 62,000; 2017: ₹ 61,000 and 2018: ₹ 63,000

#### Solution

$$\begin{aligned}\text{Average profit} &= \frac{\text{Total profit}}{\text{Number of years}} \\ &= \frac{62,000 + 61,000 + 63,000}{3} \\ &= \frac{1,86,000}{3} \\ &= ₹ 62,000\end{aligned}$$

$$\begin{aligned}\text{Normal profit} &= \text{Capital employed} \times \text{Normal rate of return} \\ &= 4,00,000 \times 10\% \\ &= ₹ 40,000\end{aligned}$$

$$\begin{aligned}\text{Super profit} &= \text{Average profit} - \text{Normal profit} \\ &= 62,000 - 40,000 \\ &= ₹ 22,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \frac{\text{Super profit}}{\text{Normal rate of return}} \times 100 \\ &= \frac{22,000}{10} \times 100 \\ &= ₹ 2,20,000\end{aligned}$$

#### 4.6.3 Capitalisation method

Under this method, goodwill is the excess of capitalised value of average profit of the business over the actual capital employed in the business.

$$\text{Goodwill} = \text{Total capitalised value of the business} - \text{Actual capital employed}$$

The total capitalised value of the business is calculated by capitalising the average profits on the basis of the normal rate of return.

$$\text{Capitalised value of the business} = \frac{\text{Average profit}}{\text{Normal rate of return}} \times 100$$

$$\text{Actual capital employed} = \text{Fixed assets (excluding goodwill)} + \text{Current assets} - \text{Current liabilities}$$

### Illustration 11

From the following information, find out the value of goodwill by capitalisation method:

- (a) Average profit = ₹ 60,000  
(b) Normal rate of return = 10%  
(c) Capital employed = ₹ 4,50,000

#### Solution

$$\begin{aligned}\text{Total capitalised value of the business} &= \frac{\text{Average profit}}{\text{Normal rate of return}} \times 100 \\ &= \frac{60,000}{10} \times 100 \\ &= ₹ 6,00,000\end{aligned}$$

$$\begin{aligned}\text{Goodwill} &= \text{Total capitalised value of the business} - \text{Capital employed} \\ &= 6,00,000 - 4,50,000 \\ &= ₹ 1,50,000\end{aligned}$$



Goodwill based on capitalisation of average profit method and capitalisation of super profit method will give the same amount of goodwill.

#### Points to remember

- ❖ Goodwill is the good name or reputation of the business which brings benefit to the business.
- ❖ It is an intangible fixed asset. Following are the circumstances that require valuation of goodwill of partnership firms in order to protect the rights of the partners:
- ❖ When the profit sharing ratio is changed, when a new partner is admitted into a firm, when an existing partner retires from the firm or when a partner dies and when a partnership firm is dissolved
- ❖ Goodwill may be classified into acquired goodwill and self-generated goodwill.
- ❖ Following are the methods generally followed to value goodwill:  
Average profits methods, super profit methods and capitalisation method

#### Self-examination questions

##### I Multiple choice questions

Choose the correct answer

1. Which of the following statements is true?

- (a) Goodwill is an intangible asset                      (b) Goodwill is a current asset  
(c) Goodwill is a fictitious asset                      (d) Goodwill cannot be acquired



2. Super profit is the difference between
- (a) Capital employed and average profit      (b) Assets and liabilities  
(c) Average profit and normal profit      (d) Current year's profit and average profit
3. The average rate of return of similar concerns is considered as
- (a) Average profit      (b) Normal rate of return  
(c) Expected rate of return      (d) None of these
4. Which of the following is true?
- (a) Super profit = Total profit / number of years  
(b) Super profit = Weighted profit / number of years  
(c) Super profit = Average profit – Normal profit  
(d) Super profit = Average profit × Years of purchase
5. Identify the incorrect pair
- (a) Goodwill under Average profit method - Average profit × Number of years of purchase  
(b) Goodwill under Super profit method - Super profit × Number of years of purchase  
(c) Goodwill under Annuity method - Average profit × Present value annuity factor  
(d) Goodwill under Weighted average profit method - Weighted average profit × Number of years of purchase
6. When the average profit is ₹ 25,000 and the normal profit is ₹ 15,000, super profit is
- (a) ₹ 25,000      (b) ₹ 5,000  
(c) ₹ 10,000      (d) ₹ 15,000
7. Book profit of 2017 is ₹ 35,000; non-recurring income included in the profit is ₹ 1,000 and abnormal loss charged in the year 2017 was ₹ 2,000, then the adjusted profit is
- (a) ₹ 36,000      (b) ₹ 35,000  
(c) ₹ 38,000      (d) ₹ 34,000
8. The total capitalised value of a business is ₹ 1,00,000; assets are ₹ 1,50,000 and liabilities are ₹ 80,000. The value of goodwill as per the capitalisation method will be
- (a) ₹ 40,000      (b) ₹ 70,000  
(c) ₹ 1,00,000      (d) ₹ 30,000

### Answers

1 (a)	2(c)	3(b)	4(c)	5 (c)	6(c)	7(a)	8(d)
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## II Very short answer questions

1. What is goodwill?
2. What is acquired goodwill?
3. What is super profit?
4. What is normal rate of return?
5. State any two circumstances under which goodwill of a partnership firm is valued.

## III Short answer questions

1. State any six factors determining goodwill.
2. How is goodwill calculated under the super profits method?
3. How is the value of goodwill calculated under the capitalisation method?
4. Compute average profit from the following information.

2016: ₹ 8,000; 2017: ₹ 10,000; 2018: ₹ 9,000

**(Answer: Average profit: ₹ 9,000)**

5. Calculate the value of goodwill at 2 years purchase of average profit when average profit is ₹ 15,000.

**(Answer: Goodwill: ₹ 30,000)**

## IV Exercises

### Simple average profit method

1. The following are the profits of a firm in the last five years:

2014: ₹ 10,000; 2015: ₹ 11,000; 2016: ₹ 12,000; 2017: ₹ 13,000 and 2018: ₹ 14,000

Calculate the value of goodwill at 2 years purchase of average profit of five years.

**(Answer: Average profit: ₹ 12,000; Goodwill: ₹ 24,000)**

2. From the following information, calculate the value of goodwill on the basis of 3 years purchase of average profits of last four years.

Year	Result	Amount ₹
2015	Profit	5,000
2016	Profit	8,000
2017	Loss	3,000
2018	Profit	6,000

**(Answer: Average profit: ₹ 4,000 ; Goodwill: ₹ 12,000)**

3. From the following information relating to a partnership firm, find out the value of its goodwill based on 3 years purchase of average profits of the last 4 years:

- (a) Profits of the years 2015, 2016, 2017 and 2018 are ₹ 10,000, ₹ 12,500, ₹ 12,000 and ₹ 11,500 respectively.
- (b) The business was looked after by a partner and his fair remuneration amounts to ₹ 1,500 per year. This amount was not considered in the calculation of the above profits.

**(Answer: Average profit: ₹ 10,000; Goodwill: ₹ 30,000)**

4. From the following information relating to Sridevi enterprises, calculate the value of goodwill on the basis of 4 years purchase of the average profits of 3 years.

- (a) Profits for the years ending 31st December 2016, 2017 and 2018 were ₹ 1,75,000, ₹ 1,50,000 and ₹ 2,00,000 respectively.
- (b) A non-recurring income of ₹ 45,000 is included in the profits of the year 2016.
- (c) The closing stock of the year 2017 was overvalued by ₹ 30,000.

**(Answer: Average profit: ₹ 1,60,000; Goodwill: ₹ 6,40,000)**

5. The following particulars are available in respect of the business carried on by a partnership firm:

- (i) Profits earned: 2016: ₹ 25,000; 2017: ₹ 23,000 and 2018: ₹ 26,000.
- (ii) Profit of 2016 includes a non-recurring income of ₹ 2,500.
- (iii) Profit of 2017 is reduced by ₹ 3,500 due to stock destroyed by fire.
- (iv) The stock was not insured. But, it is decided to insure the stock in future. The insurance premium is estimated to be ₹ 250 per annum.

You are required to calculate the value of goodwill of the firm on the basis of 2 years purchase of average profits of the last three years.

**(Answer: Average profit: ₹ 24,750; Goodwill: ₹ 49,500)**

### Weighted average profit method

6. Find out the value of goodwill at three years purchase of weighted average profit of last four years.

Year	Profit ₹	Weight
2015	10,000	1
2016	12,000	2
2017	16,000	3
2018	18,000	4

**(Answer: Weighted average profit: ₹ 15,400; Goodwill: ₹ 46,200)**



### Purchase of super profit method

7. From the following details, calculate the value of goodwill at 2 years purchase of super profit:

- (a) Total assets of a firm are ₹ 5,00,000
- (b) The liabilities of the firm are ₹ 2,00,000
- (c) Normal rate of return in this class of business is 12.5 %.
- (d) Average profit of the firm is ₹ 60,000.

**(Answer: Super profit: ₹ 22,500; Goodwill: ₹ 45,000).**

8. A partnership firm earned net profits during the last three years as follows:

2016 : ₹ 20,000; 2017 : ₹ 17,000 and 2018 : ₹ 23,000

The capital investment of the firm throughout the above mentioned period has been ₹ 80,000. Having regard to the risk involved, 15% is considered to be a fair return on capital employed in the business. Calculate the value of goodwill on the basis of 2 years purchase of super profit.

**(Answer: Super profit: ₹ 8,000; Goodwill: ₹ 16,000)**

### Annuity method

9. From the following information, calculate the value of goodwill under annuity method:

- (i) Average profit ₹ 14,000
- (ii) Normal Profit ₹ 4,000
- (iii) Normal rate of return 15%
- (iv) Years of purchase of goodwill 5

Present value of ₹ 1 for 5 years at 15% per annum as per the annuity table is 3.352

**(Answer: Super profit: ₹ 10,000; Goodwill: ₹ 33,520)**

### Capitalisation of super profit method

10. Find out the value of goodwill by capitalising super profits:

- (a) Normal Rate of Return 10%
- (b) Profits for the last four years are ₹ 30,000, ₹ 40,000, ₹ 50,000 and ₹ 45,000.
- (c) A non-recurring income of ₹ 3,000 is included in the above mentioned profit of ₹ 30,000.
- (d) Average capital employed is ₹ 3,00,000.

**(Answer: Average profit: ₹ 40,500; Super profit: ₹ 10,500; Goodwill: ₹ 1,05,000)**

### Capitalisation method

11. From the following information, find out the value of goodwill by capitalisation method:

- (i) Average profit ₹ 20,000
- (ii) Normal rate of return 10%
- (iii) Capital employed ₹ 1,50,000

**(Answer: Total capitalised value: ₹ 2,00,000;  
Goodwill: ₹ 50,000)**



  
**CASE STUDY**

Priya, Praveen and Pooja started a partnership business of buying and selling of home appliances. They have a partnership agreement. The shop is located in a prime area where there are many potential customers. The employees are trained well and motivated. The partners have good managerial skills. As a result, the customers' needs are met efficiently. The customers are happy with the after sale service too. In a very short period of time the firm gained popularity and strong customer base.

After two years, the partners decide that the business is worth more than its net assets. So, they value goodwill and want to record it in the books.

Discuss the following:

- (1) Identify the factors that are affecting the valuation of goodwill in this business.
- (2) Name the methods for the valuation of goodwill.
- (3) Do you agree with the partners' decision of recording the goodwill in the books? If you do not agree, explain the reasons with reference to the Accounting Standards..

### To explore further

A partnership firm wants to expand, but it needs two more people with managerial skills to run the business competently. Also, the business needs more finance to expand. What can be done in such a situation?

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# UNIT 5

## ADMISSION OF A PARTNER



### Contents

- 5.1 Introduction
- 5.2 Adjustments required at the time of admission of a partner
- 5.3 Distribution of accumulated profits, reserves and losses
- 5.4 Revaluation of assets and liabilities
- 5.5 New profit sharing ratio and Sacrificing ratio
- 5.6 Adjustment for goodwill
- 5.7 Adjustment of capital on the basis of new profit sharing ratio



### Points to recall

The following points are to be recalled before learning admission of a partner:

- ◇ Meaning and features of partnership firm
- ◇ Partnership deed
- ◇ Partners' capital accounts
- ◇ Valuation of goodwill



### Learning objectives

To enable the students to

- ◇ Understand the accounting treatment at the time of admission of a partner
- ◇ Prepare revaluation account, capital accounts and balance sheet of the firm after admission of a partner.

### Key terms to know

- ◇ Admission of a partner
- ◇ Sacrificing ratio
- ◇ Revaluation account



## 5.1 Introduction



### Student activity 5.1

Assume you are a partner in a firm. You are going to admit a new partner into your firm. Think of any five agreements that you may want to include in your partnership deed.

A person may join as a new partner in an existing partnership firm. This is called admission of a partner. The purpose of admission of a new partner may be to raise additional capital for expansion of business or managerial skill of the new partner or both. Generally, the new partner has to contribute capital to the firm and thereby he / she acquires the right to share the future profits and the assets of the firm.

On admission of a new partner, the firm is reconstituted with a new agreement and the existing agreement comes to an end.

According to Section 31(1) of the Indian Partnership Act, 1932, subject to contract between the partners no person shall be introduced as a partner into a firm without the consent of all the existing partners.

## 5.2 Adjustments required at the time of admission of a partner

On admission, the new partner may bring capital in cash or in kind or both. The following journal entry is passed to record the capital brought in.

### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Cash or Bank A/c	Dr.	xxx	
	Assets A/c	Dr.	xxx	
	To Partner's capital A/c			xxx

On the admission of a partner, generally there is a change in the mutual rights of the partners. The new partner becomes liable for all the acts which are carried out by the firm from the date of his / her admission into the firm. Hence, the accumulated profits, losses and reserves before admission are to be distributed to the existing partners. Similarly, assets and liabilities are to be revalued and the profit or loss on revaluation is to be distributed to the existing partners. The following adjustments are necessary at the time of admission of a partner:

1. Distribution of accumulated profits, reserves and losses
2. Revaluation of assets and liabilities
3. Determination of new profit-sharing ratio and sacrificing ratio
4. Adjustment for goodwill
5. Adjustment of capital on the basis of new profit sharing ratio (if so agreed)

## 5.3 Distribution of accumulated profits, reserves and losses

Profits and losses of previous years which are not distributed to the partners are called accumulated profits and losses. Any reserve and accumulated profits and losses belong to

the old partners and hence these should be distributed to the old partners in the old profit sharing ratio. Reserves include general reserve, reserve fund, workmen compensation fund and investment fluctuation fund. In case of workmen compensation fund, the excess amount after providing for anticipated claim is the accumulated profit to be transferred.

Following are the journal entries to be passed:

**(a) For transferring accumulated profit and reserves**

**Journal entry**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Profit and loss appropriation A/c	Dr.	xxx	
	General reserve A/c	Dr.	xxx	
	Reserve fund A/c	Dr.	xxx	
	Workmen compensation fund A/c	Dr.	xxx	
	Investment fluctuation fund A/c	Dr.	xxx	
	To Old partners' capital / current A/c (in the old ratio)			xxx

**(b) For transferring accumulated loss**

**Journal entry**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Old partner's capital / current A/c	Dr.	xxx	
	To Profit and loss A/c (in old ratio)			xxx



**Investment fluctuation fund**

Investment fluctuation fund is created out of profit to adjust the reduction in the market value of the investments. If the market value of the investments is greater than or equal to the book value, then, the entire investment fluctuation fund is transferred to the old partners' capital account in old profit sharing ratio. If the market value of the investments is less than the book value, then the difference is to be subtracted from the investment fluctuation fund and the balance of investment fluctuation fund is to be transferred to the old partners' capital account in old profit sharing ratio.

**Illustration 1**

Mala and Vimala were partners sharing profits and losses in the ratio of 3:2. On 31.3.2017, Varshini was admitted as a partner. On the date of admission, the book of the firm showed a reserve fund of ₹ 50,000. Pass the journal entry to distribute the reserve fund.

## Solution

### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2017 March 31	Reserve fund A/c Dr. To Mala's capital A/c (50,000 x 3/5) To Vimala's capital A/c (50,000 x 2/5) (Reserve fund transferred to old partners' capital account in the old profit sharing ratio)		50,000	30,000 20,000

## Illustration 2

Kavitha and Radha are partners of a firm sharing profits and losses in the ratio of 4:3. They admit Deepa on 1.1.2019. On that date, their balance sheet showed debit balance of profit and loss account being accumulated loss of ₹ 70,000 on the asset side of the balance sheet. Give the journal entry to transfer the accumulated loss on admission.

## Solution

### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019 January 1	Kavitha's capital A/c Dr. Radha's capital A/c Dr. To Profit and loss a/c (Accumulated loss transferred to old partners' capital account in the old profit sharing ratio)		40,000 30,000	70,000

## Illustration 3

Rathna Kumar and Arockia Das are partners in a firm sharing profits and losses in the ratio of 3:2. Their balance sheet as on 31st March, 2017 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Buildings	30,000
Rathna Kumar	30,000		Plant	60,000
Arockia Das	50,000	80,000	Furniture	20,000
Profit and loss appropriation A/c		20,000	Debtors	10,000
General reserve		5,000	Stock	15,000
Workmen compensation fund		15,000	Cash at bank	15,000
Sundry creditors		30,000		
		1,50,000		1,50,000

David was admitted into the partnership on 1.4.2017. Pass journal entry to distribute the accumulated profits and reserve on admission.

## Solution

### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2017	Profit and loss appropriation A/c	Dr.	20,000	
April 1	General reserve A/c	Dr.	5,000	
	Workmen compensation fund A/c	Dr.	15,000	
	To Rathna Kumar's capital A/c (40,000 x 3/5)			24,000
	To Arockia Das's capital A/c (40,000 x 2/5)			16,000
	(Accumulated profit and reserve transferred to old partners' capital account in the old profit sharing ratio)			

## 5.4 Revaluation of assets and liabilities

When a partner is admitted into the partnership, the assets and liabilities are revalued as the current value may differ from the book value. Determination of current values of assets and liabilities is called revaluation of assets and liabilities. The reasons for revaluation of assets and liabilities are as follows:

- (i) To give a true and fair view of the state of affairs of the firm and
- (ii) To share the gain arising from the revaluation of assets and liabilities as it is due to the old partners.

There are two ways in which the revaluation of assets and liabilities may be dealt with in the accounts.

- (a) Revised value of assets and liabilities are shown in the books
- (b) Revised value of assets and liabilities are not shown in the books

### 5.4.1 When revised value of assets and liabilities are shown in the books

Under this method, the assets and liabilities are shown at their revised values in the books and in the balance sheet which is prepared immediately after the admission of a partner. A Revaluation account is opened to record the increase or decrease in assets and liabilities. Revaluation account is also called Profit and loss adjustment account. It is a nominal account. Revaluation account is credited with increase in value of assets and decrease in the value of liabilities. It is debited with decrease in value of assets and increase in the value of liabilities. Unrecorded assets if any are credited and unrecorded liabilities if any are debited to the revaluation account. The profit or loss arising therefrom is transferred to the capital accounts of the old partners in the old profit sharing ratio. If the total of the credit side of the revaluation account exceeds the total of the debit side, the difference is profit on revaluation. If the total of the debit side of the revaluation account exceeds the total of the credit side, the difference is loss on revaluation.

Following are the journal entries to be passed to record the revaluation of assets and liabilities:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	<b>1. For increase in the value of asset</b> Concerned asset A/c Dr. To Revaluation A/c		xxx	xxx
	<b>2. For decrease in the value of asset</b> Revaluation A/c Dr. To Concerned asset A/c		xxx	xxx
	<b>3. For increase in the amount of liabilities</b> Revaluation A/c Dr. To Concerned liability A/c		xxx	xxx
	<b>4. For decrease in the amount of liability</b> Concerned liability A/c Dr. To Revaluation A/c		xxx	xxx
	<b>5. For recording an unrecorded asset</b> Concerned asset A/c Dr. To Revaluation A/c		xxx	xxx
	<b>6. For recording an unrecorded liability</b> Revaluation A/c Dr. To Concerned liability A/c		xxx	xxx
	<b>7. For transferring the balance in revaluation A/c</b> (a) If there is profit on revaluation Revaluation A/c Dr. To Old partners' capital A/c (individually in old ratio)		xxx	xxx
	(b) If there is loss on revaluation Old partners' capital A/c (individually in old ratio) Dr. To Revaluation A/c		xxx	xxx

#### Format of Revaluation Account:

Dr.		Revaluation Account		Cr.	
Particulars	₹	Particulars	₹		
To Concerned asset A/c (net decrease)	xxx	By Concerned asset A/c (net increase)	xxx		
To Concerned liability A/c (net increase)	xxx	By Concerned liability A/c (net decrease)	xxx		
To Old partners' capital A/c (profit on revaluation shared in old ratio)*	xxx	By Old partners' capital A/c (loss on revaluation shared in old ratio)*	xxx		
	xxx		xxx		

\*There will be either profit or loss on revaluation.

### Illustration 4

Rajesh and Ramesh are partners sharing profits in the ratio 3:2. Raman is admitted as a new partner and the new profit sharing ratio is decided as 5:3:2. The following revaluations are made. Pass journal entries and prepare revaluation account.

- The value of building is increased by ₹ 15,000.
- The value of the machinery is decreased by ₹ 4,000.
- Provision for doubtful debt is made for ₹ 1,000.

### Solution

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Buildings A/c To Revaluation A/c (Appreciation in value of buildings recorded)	Dr.	15,000	15,000
	Revaluation A/c To Machinery A/c To Provision for doubtful debts A/c (Decrease in assets recorded and provision made)	Dr.	5,000	4,000 1,000
	Revaluation A/c To Rajesh's capital A/c To Ramesh's capital A/c (Profit on revaluation transferred)	Dr.	10,000	6,000 4,000

Dr.

#### Revaluation Account

Cr.

Particulars	₹	₹	Particulars	₹
To Machinery A/c		4,000	By Buildings A/c	15,000
To Provision for doubtful debts A/c		1,000		
To Profit on revaluation transferred to				
Rajesh's capital A/c (3/5)	6,000			
Ramesh's capital A/c (2/5)	4,000	10,000		
		15,000		15,000

### Illustration 5

Sriram and Raj are partners sharing profits and losses in the ratio of 2:1. Nelson joins as a partner on 1st April 2017. The following adjustments are to be made:

- Increase the value of stock by ₹ 5,000
- Bring into record investment of ₹ 7,000 which had not been recorded in the books of the firm.
- Reduce the value of office equipment by ₹ 10,000
- A provision would also be made for outstanding wages for ₹ 9,500.

Give journal entries and prepare revaluation account.

### Solution

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
2017 April 1	Stock A/c Investment A/c To Revaluation A/c (Increase in the value of stock and unrecorded investment accounted)	Dr. Dr.	5,000 7,000	12,000
„	Revaluation A/c To Office equipment A/c To Outstanding wages A/c (Reduction in the value of office equipment and provision of outstanding wages recorded)	Dr.	19,500	10,000 9,500
„	Sriram's capital A/c Raj's capital A/c To Revaluation A/c (Loss on revaluation transferred)	Dr. Dr.	5,000 2,500	7,500

Dr.

#### Revaluation Account

Cr.

Particulars	₹	Particulars	₹	₹
To Office equipment A/c	10,000	By Stock A/c		5,000
To Outstanding wages A/c	9,500	By Investment A/c		7,000
		By Loss on revaluation transferred to		
		Sriram's capital A/c (2/3)	5,000	
		Raj's capital A/c (1/3)	2,500	7,500
	19,500			19,500



### Illustration 6

Raghu and Sam are partners in a firm sharing profits and losses in the ratio of 3:2. Their balance sheet as on 31st March, 2017 is as follows:

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Machinery		30,000
Raghu	40,000		Furniture		10,000
Sam	30,000	70,000	Stock		10,000
Sundry creditors		30,000	Debtors	21,000	
			Less: Provision for doubtful debts	1,000	20,000
			Bank		30,000
		1,00,000			1,00,000

Prakash is admitted on 1.4.2017 subject to the following conditions:

- He has to bring a capital of ₹ 10,000
- Machinery is valued at ₹ 24,000
- Furniture to be depreciated by ₹ 3,000
- Provision for doubtful debts should be increased to ₹ 3,000
- Unrecorded trade receivables of ₹ 1,000 would be brought into books now

Pass necessary journal entries and prepare revaluation account and capital account of partners after admission.

### Solution

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
2017 April 1	Bank A/c To Prakash's capital A/c (Capital brought by Prakash)	Dr.	10,000	10,000
„	Revaluation A/c To Machinery A/c To Furniture A/c To Provision for doubtful debts A/c (Depreciation on machinery and furniture and provision made for doubtful debts adjusted)	Dr.	11,000	6,000 3,000 2,000

„	Trade receivables A/c To Revaluation A/c (Unrecorded trade receivables recorded)		1,000	1,000
„	Raghu's capital A/c Sam's capital A/c To Revaluation A/c (Loss on revaluation transferred to capital accounts)	Dr.	6,000 4,000	10,000

**Dr. Revaluation Account Cr.**

Particulars	₹	Particulars	₹	₹
To Machinery	6,000	By Trade receivables A/c		1,000
To Furniture	3,000	By Loss on revaluation transferred to		
To Provision for bad debts	2,000	Raghu's capital A/c (3/5)	6,000	
		Sam's capital A/c (2/5)	4,000	10,000
	11,000			11,000

**Dr. Capital Account Cr.**

Date	Particulars	Ragu ₹	Sam ₹	Prakash ₹	Date	Particulars	Ragu ₹	Sam ₹	Prakash ₹
	To Revaluation A/c	6,000	4,000	-		By Balance b/d	40,000	30,000	-
	To Balance c/d	34,000	26,000	10,000		By Bank	-	-	10,000
		40,000	30,000	10,000			40,000	30,000	10,000
						By Balance b/d	34,000	26,000	10,000

**Illustration 7**

Anand and Balu are partners in a firm sharing profits and losses in the ratio of 7:3. Their balance sheet as on 31st March, 2018 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Land	60,000
Anand	50,000		Stock	40,000
Balu	30,000	80,000	Debtors	20,000
Sundry creditors		20,000	Cash in hand	10,000
Profit and loss A/c		30,000		
		1,30,000		1,30,000

Chandru is admitted as a new partner on 1.4.2018 by introducing a capital of ₹ 20,000 for 1/4 share in the future profit subject to the following adjustments:

- Stock to be depreciated by ₹ 3,000
- Provision for doubtful debts to be created for ₹ 2,000.
- Land was to be appreciated by ₹ 10,000

Prepare revaluation account and capital account of partners after admission.

### Solution

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Stock		3,000	By Land A/c	10,000	
To Provision for doubtful debts		2,000			
To Profit on revaluation transferred to					
Anand's capital A/c (7/10)	3,500				
Balu's capital A/c (3/10)	1,500	5,000			
		10,000		10,000	

Dr.		Capital Account			Cr.		
Particulars	Anand ₹	Balu ₹	Chandru ₹	Particulars	Anand ₹	Balu ₹	Chandru ₹
To Balance c/d	74,500	40,500	20,000	By Balance b/d	50,000	30,000	-
				By Bank A/c	-	-	20,000
				By Revaluation A/c	3,500	1,500	-
				By Profit and loss A/c	21,000	9,000	-
	74,500	40,500	20,000		74,500	40,500	20,000
				By Balance b/d	74,500	40,500	20,000



### Student activity 5.2

Whole class game: Change your position

One student says a transaction. If that transaction has the effect of revaluation gain, other students should stand up and vice versa.

Examples: When one student says depreciation of buildings, others should sit down.

When one student says furniture revaluation upwards, others should stand up.

It can also be played in groups or pairs.

### 5.4.2 When revised values of assets and liabilities are not shown in the books

Under this method, the assets and liabilities are shown at their original values and not at the revised values in the books and in the balance sheet which is prepared immediately after the admission of a partner. The net result of revaluation is adjusted through the capital accounts of the partners. A Memorandum revaluation account which is a temporary account is opened when the revised values are not to be shown in the books of accounts.

## 5.5 New profit sharing ratio and sacrificing ratio

### 5.5.1 New profit sharing ratio

It is necessary to determine the new profit sharing ratio at the time of admission of a partner because the new partner is entitled to share the future profits of the firm. New profit sharing ratio is the agreed proportion in which future profit will be distributed to all the partners including the new partner. If the new profit sharing ratio is not agreed, the partners will share the profits and losses equally.

### 5.5.2 Sacrificing ratio

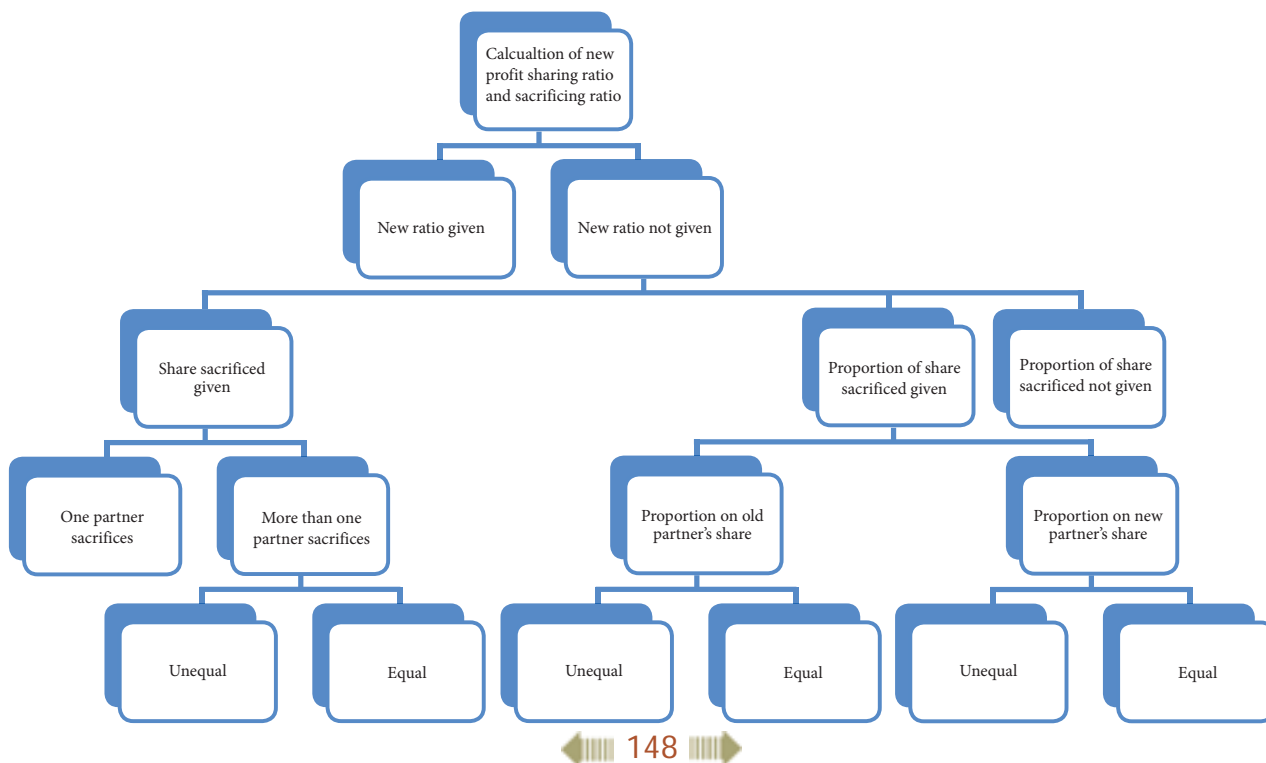
The old partners may sacrifice a portion of the share of profit to the new partner. The sacrifice may be made by all the partners or some of the partners. Sacrificing ratio is the proportion of the profit which is sacrificed or foregone by the old partners in favour of the new partner. The purpose of finding the sacrificing ratio is to share the goodwill brought in by the new partner. The share sacrificed is calculated by deducting the new share from the old share.

$$\text{Share sacrificed} = \text{Old share} - \text{New share}$$

$$\text{Sacrificing ratio} = \text{Ratio of share sacrificed by the old partners}$$

Share of the new partner is the sum of shares sacrificed by the old partners.

**Tutorial note:** When the new profit sharing ratio is not given in the problem, it is to be calculated based on the information given in the problem.





Sometimes an existing partner may also gain in share of profit on admission of a partner when the new share is greater than the old share. In this case, the gaining partner has to compensate the sacrificing partners to the extent of his share in the total goodwill of the firm.

## Calculation of sacrificing ratio and new profit sharing ratio under different situations

### 1. When new profit sharing ratio is given

When new profit sharing ratio is given, sacrificing ratio has to be calculated as follows:

Sacrificing ratio = Ratio of share sacrificed by the old partners

Share sacrificed = Old share - New share

### Illustration 8

Anbu and Raju are partners, sharing profits in the ratio of 3:2. Akshai is admitted as a partner. The new profit sharing ratio among Anbu, Raju and Akshai is 5:3:2. Find out the sacrificing ratio.

#### Solution

$$\text{Old ratio of Anbu and Raju} = 3:2 \text{ that is, } \frac{3}{5} : \frac{2}{5}$$

$$\text{New ratio of Anbu, Raju and Akshai} = 5:3:2 \text{ that is, } \frac{5}{10} : \frac{3}{10} : \frac{2}{10}$$

$$\text{Share sacrificed} = \text{Old share} - \text{New share}$$

$$\text{Anbu} = \frac{3}{5} - \frac{5}{10} = \frac{6-5}{10} = \frac{1}{10}$$

$$\text{Raju} = \frac{2}{5} - \frac{3}{10} = \frac{4-3}{10} = \frac{1}{10}$$

$$\text{Sacrificing ratio of Anbu and Raju is } \frac{1}{10} : \frac{1}{10} \text{ that is } 1:1$$

### 2. When new profit sharing ratio is not given

#### (a) When share sacrificed is given

When new profit sharing ratio is not given, but the share sacrificed by the old partner(s) is given, new profit sharing ratio is calculated as follows:

New share of old partner	= Old share - Share sacrificed
Share of new partner	= Sum of shares sacrificed by old partners

### Illustration 9

Hari and Saleem are partners sharing profits and losses in the ratio of 5:3. They admit Joel for  $\frac{1}{8}$  share, which he acquires entirely from Hari. Find out the new profit sharing ratio and sacrificing ratio.

#### Solution

Computation of sacrificing ratio and new profit sharing ratio

Share sacrificed by old partners

$$\text{Hari} = \frac{1}{8}$$

$$\text{Saleem} = 0$$

$$\text{Sacrificing ratio} = 1:0$$

Old ratio of Hari and Saleem is 5:3 that is  $\frac{5}{8} : \frac{3}{8}$

New share of old partner = Old share - Share sacrificed

$$\text{Hari} = \frac{5}{8} - \frac{1}{8} = \frac{5-1}{8} = \frac{4}{8}$$

$$\text{Saleem} = \frac{3}{8}$$

Share of new partner

$$\text{Joel} = \frac{1}{8}$$

New profit sharing ratio of Hari, Saleem and Joel is  $\frac{4}{8} : \frac{3}{8} : \frac{1}{8}$  that is, 4:3:1

### Illustration 10

Ravi and Kumar share profits and losses in the ratio of 7:3. Christy is admitted as a new partner with  $\frac{3}{7}$  share which he acquires  $\frac{2}{7}$  from Ravi and  $\frac{1}{7}$  from Kumar. Calculate the new profit sharing ratio and sacrificing ratio.

#### Solution

Computation of sacrificing ratio and new profit sharing ratio

$$\text{Shares sacrificed} = \frac{2}{7}, \frac{1}{7}$$

Sacrificing ratio of Ravi and Kumar is 2:1

$$\text{Old profit sharing ratio} = 7:3 \text{ or } \frac{7}{10} : \frac{3}{10}$$

New share of old partners = Old share - Share sacrificed

$$\text{Ravi} = \frac{7}{10} - \frac{2}{7} = \frac{49-20}{70} = \frac{29}{70}$$

$$\text{Kumar} = \frac{3}{10} - \frac{1}{7} = \frac{21-10}{70} = \frac{11}{70}$$

Share of new partner  
**Christy**  $= \frac{3}{7}$

In order to equate the denominator of Christy's share, multiply and divide by 10

$$= \frac{3}{7} \times \frac{10}{10} = \frac{30}{70}$$

New profit sharing ratio of Ravi, Kumar and Christy  $= \frac{29}{70} : \frac{11}{70} : \frac{30}{70} = 29 : 11 : 30$

### Illustration 11

Hameed and Govind are partners sharing profits and losses in the ratio of 5:3. They admit John as a partner. John acquires his share  $\frac{1}{5}$  from Hameed and  $\frac{1}{5}$  from Govind. Find out the new profit sharing ratio and sacrificing ratio.

### Solution

Computation of sacrificing ratio and new profit sharing ratio

Share sacrificed  $= \frac{1}{5}, \frac{1}{5}$

Sacrificing ratio of Hameed and Govind is 1:1

Old ratio is 5:3 that is  $\frac{5}{8} : \frac{3}{8}$

New share of old partner = Old share - Share sacrificed

**Hameed**  $= \frac{5}{8} - \frac{1}{5} = \frac{25-8}{40} = \frac{17}{40}$

**Govind**  $= \frac{3}{8} - \frac{1}{5} = \frac{15-8}{40} = \frac{7}{40}$

Share of new partner

**John** = Sum of shares sacrificed by old partners  
 $= \frac{1}{5} + \frac{1}{5} = \frac{2}{5}$

In order to equalise the denominator of John's share, multiply and divide by 8

John's share  $= \frac{2}{5} \times \frac{8}{8} = \frac{16}{40}$

New profit sharing ratio of Hameed, Govind and John is  $\frac{17}{40} : \frac{7}{40} : \frac{16}{40}$  or 17:7:16

### (b) When proportion of share sacrificed is given

#### (i) When share sacrificed is given as a proportion on old partners' share

When new profit sharing ratio is not given, but the share sacrificed is given as a proportion on old partners' share, new profit sharing ratio is calculated as follows:

Share sacrificed by old partner	= Old share x Proportion of share sacrificed
New share of old partner	= Old share - Share sacrificed
Share of new partner	= Sum of shares sacrificed by old partners

### Illustration 12

Suresh and Dinesh are partners sharing profits in the ratio of 3:2. They admit Ramesh as a new partner. Suresh surrenders  $\frac{1}{5}$  of his share in favour of Ramesh. Dinesh surrenders  $\frac{2}{5}$  of his share in favour of Ramesh. Calculate the new profit sharing ratio and sacrificing ratio.

#### Solution

Computation of sacrificing ratio and new profit sharing ratio

Old share = 3:2 that is, Suresh  $\frac{3}{5}$  and Dinesh  $\frac{2}{5}$

Share sacrificed = Old share x Proportion of share sacrificed

$$\text{Suresh} = \frac{3}{5} \times \frac{1}{5} = \frac{3}{25}$$

$$\text{Dinesh} = \frac{2}{5} \times \frac{2}{5} = \frac{4}{25}$$

Sacrificing ratio of Suresh and Dinesh is  $\frac{3}{25}$  and  $\frac{4}{25}$ , that is, 3:4

New share = Old share - Share sacrificed

$$\text{Suresh} = \frac{3}{5} - \frac{3}{25} = \frac{15-3}{25} = \frac{12}{25}$$

$$\text{Dinesh} = \frac{2}{5} - \frac{4}{25} = \frac{10-4}{25} = \frac{6}{25}$$

Share of new partner = Sum of shares sacrificed by Suresh and Dinesh

$$\text{Ramesh} = \frac{3}{25} + \frac{4}{25} = \frac{3+4}{25} = \frac{7}{25}$$

New profit sharing ratio of Suresh, Dinesh and Ramesh =  $\frac{12}{25} : \frac{6}{25} : \frac{7}{25}$  that is, 12:6:7

### Illustration 13

Prasanth and Nisha are partners sharing profits and losses in the ratio of 3:2. They admit Ramya as a new partner. Prasanth surrenders  $\frac{2}{5}$  of his share and Nisha surrenders  $\frac{2}{5}$  of her share in favour of Ramya. Calculate the new profit sharing ratio and sacrificing ratio.

#### Solution

Computation of sacrificing ratio and new profit sharing ratio

Old share = 3:2 that is, Prasanth  $\frac{3}{5}$  and Nisha  $\frac{2}{5}$



Share sacrificed = Old share  $\times$  Proportion of share sacrificed

$$\text{Prasanth} = \frac{3}{5} \times \frac{2}{5} = \frac{6}{25}$$

$$\text{Nisha} = \frac{2}{5} \times \frac{2}{5} = \frac{4}{25}$$

Sacrificing ratio of Prasanth and Nisha is  $\frac{6}{25}$  and  $\frac{4}{25}$ , that is, 3:2

New share = Old share - Share sacrificed

$$\text{Prasanth} = \frac{3}{5} - \frac{6}{25} = \frac{15-6}{25} = \frac{9}{25}$$

$$\text{Nisha} = \frac{2}{5} - \frac{4}{25} = \frac{10-4}{25} = \frac{6}{25}$$

Share of new partner = Sum of shares sacrificed by Prasanth and Nisha

$$\text{Ramya} = \frac{6}{25} + \frac{4}{25} = \frac{6+4}{25} = \frac{10}{25}$$

New profit sharing ratio of Prasanth, Nisha and Ramya =  $\frac{9}{25} : \frac{6}{25} : \frac{10}{25}$  that is, 9:6:10

#### (ii) When proportion of share sacrificed on new partner's share is given

When new profit sharing ratio is not given, but the proportion of share sacrificed on new partner's share is given, new profit sharing ratio is calculated as follows:

$$\text{New share of old partner} = \text{Old share} - \text{Share sacrificed}$$

$$\text{Share sacrificed} = \text{New partner's share} \times \text{Proportion of share sacrificed}$$

#### Illustration 14

Ramesh and Raju are partners sharing profits in the ratio of 2:1. They admit Ranjan into partnership with  $\frac{1}{4}$  share of profit. Ranjan acquired the share from old partners in the ratio of 3:2. Calculate the new profit sharing ratio and sacrificing ratio.

#### Solution

##### Computation of sacrificing ratio and new profit sharing ratio

$$\text{Ranjan's share} = \frac{1}{4}$$

$$\text{Old ratio} = 2:1 \text{ that is, } \frac{2}{3} : \frac{1}{3}$$

$$\text{Proportion of share sacrificed} = 3:2 \text{ that is, } \frac{3}{5} : \frac{2}{5}$$

$$\text{Share sacrificed} = \text{New partner's share} \times \text{Proportion of share sacrificed}$$

$$\text{Ramesh} = \frac{1}{4} \times \frac{3}{5} = \frac{3}{20}$$

$$\text{Raju} = \frac{1}{4} \times \frac{2}{5} = \frac{2}{20}$$

Sacrificing ratio of Ramesh and Raju is  $\frac{3}{20}$  and  $\frac{2}{20}$ , that is, 3:2

New share of old partner = Old share - Share sacrificed

$$\text{Ramesh} = \frac{2}{3} - \frac{3}{20} = \frac{40-9}{60} = \frac{31}{60}$$

$$\text{Raju} = \frac{1}{3} - \frac{2}{20} = \frac{20-6}{60} = \frac{14}{60}$$

Share of new partner

$$\text{Ranjan} = \frac{1}{4}$$

In order to equate the denominator, multiply and divide Ranjan's share by 15

$$= \frac{1}{4} \times \frac{15}{15} = \frac{15}{60}$$

Thus, the new profit sharing ratio =  $\frac{31}{60} : \frac{14}{60} : \frac{15}{60} = 31:14:15$

### Illustration 15

Mahesh and Dhanush are partners sharing profits and losses in the ratio of 2:1. Arun is admitted for  $\frac{1}{4}$  share which he acquired equally from both Mahesh and Dhanush. Calculate the new profit sharing ratio and sacrificing ratio.

#### Solution

##### Computation of sacrificing ratio and new profit sharing ratio

$$\text{Arun's share} = \frac{1}{4}$$

$$\text{Proportion of share sacrificed} = 1:1 \text{ (equally) i.e. } \frac{1}{2} : \frac{1}{2}$$

Share sacrificed = New partner's share  $\times$  Proportion of share sacrificed

$$\text{Mahesh} = \frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$$

$$\text{Dhanush} = \frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$$

Sacrificing ratio of Mahesh and Dhanush is  $\frac{1}{8} : \frac{1}{8}$  that is, 1:1

New share of old partner = Old share - Share sacrificed

$$\text{Mahesh} = \frac{2}{3} - \frac{1}{8} = \frac{16-3}{24} = \frac{13}{24}$$

$$\text{Dhanush} = \frac{1}{3} - \frac{1}{8} = \frac{8-3}{24} = \frac{5}{24}$$

Share of new partner

$$\text{Arun} = \frac{1}{4}$$

In order to equate, multiply and divide Arun's share by 6

$$= \frac{1}{4} \times \frac{6}{6} = \frac{6}{24}$$

New profit sharing ratio of Mahesh, Dhanush and Arun =  $\frac{13}{24} : \frac{5}{24} : \frac{6}{24}$  that is, 13:5:6.

### (c) When share sacrificed and proportion of share sacrificed is not given

When new profit sharing ratio, share sacrificed and the proportion of share sacrificed is not given, but only the share of new partner is given, new profit sharing ratio is calculated by assuming that the share sacrificed is the proportion of old share. New profit sharing ratio is calculated as follows:

Share sacrificed	= New partner's share x Old share
New share of old partner	= Old share - Share sacrificed

### Illustration 16

Vimal and Athi are partners sharing profits in the ratio of 2:1. Jeyam is admitted for 1/4 share in the profits. Calculate the new profit sharing ratio and sacrificing ratio.

#### Solution

#### Computation of sacrificing ratio and new profit sharing ratio

Since share sacrificed, proportion of share sacrificed and new profit sharing ratio are not given, it is assumed that the existing partners sacrifice in their old profit sharing ratio, that is, 2:1.

Sacrificing ratio of Vimal and Athi is 2:1

Let the total share be 1

$$\text{Jeyam's share} = \frac{1}{4}$$

$$\text{Remaining share} = 1 - \frac{1}{4} = \frac{4-1}{4}$$

$$= \frac{3}{4}$$

New share of old partners = Remaining share × Old share

$$\text{Vimal} = \frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$$

$$\text{Athi} = \frac{3}{4} \times \frac{1}{3} = \frac{3}{12}$$

$$\begin{aligned} \text{Share of new partner} \\ \text{Jeyam} &= \frac{1}{4} \end{aligned}$$

In order to equalise the denominator, multiply and divide by 3

$$\text{Jeyam's share} = \frac{1}{4} \times \frac{3}{3} = \frac{3}{12}$$

New profit sharing ratio of Vimal, Athi and Jeyam =  $\frac{6}{12} : \frac{3}{12} : \frac{3}{12}$  that is, 2:1:1

### Illustration 17

Anil, Sunil and Hari are partners in a firm sharing profits in the ratio of 4:3:3. They admit Raja for 20% profit. Calculate the new profit sharing ratio and sacrificing ratio.

#### Solution

#### Computation of sacrificing ratio and new profit sharing ratio

Old ratio of Anil, Sunil and Hari = 4:3:3 or  $\frac{4}{10} : \frac{3}{10} : \frac{3}{10}$

Raja's share of profit = 20% or 20/100 or 1/5

Let the total share be 1

$$\begin{aligned} \text{Remaining share} &= 1 - \frac{1}{5} = \frac{5-1}{5} \\ &= \frac{4}{5} \end{aligned}$$

New share of old partners = Remaining share  $\times$  Old share

$$\text{Anil} = \frac{4}{5} \times \frac{4}{10} = \frac{16}{50}$$

$$\text{Sunil} = \frac{4}{5} \times \frac{3}{10} = \frac{12}{50}$$

$$\text{Hari} = \frac{4}{5} \times \frac{3}{10} = \frac{12}{50}$$

$$\begin{aligned} \text{Share of new partner} \\ \text{Raja} &= \frac{1}{5} \end{aligned}$$

In order to equalise the denominator, multiply and divide Raja's share by 10

$$\text{Raja's share} = \frac{1}{5} \times \frac{10}{10} = \frac{10}{50}$$

New profit sharing ratio of Anil, Sunil, Hari and Raja =  $\frac{16}{50} : \frac{12}{50} : \frac{12}{50} : \frac{10}{50}$  that is, 8:6:6:5.  
Sacrificing ratio = 4:3:3

## 5.6 Adjustment for goodwill

Reputation built up by a firm has an impact on the present profit and future profit to be earned by the firm. At the time of admission of a partner, the existing partners sacrifice part of their

share of profit in favour of the new partner. Hence, to compensate the sacrifice made by the existing partners, goodwill of the firm has to be valued and adjusted. In addition to capital, the new partner may contribute towards goodwill. This goodwill is distributed in the sacrificing ratio to the old partners who sacrifice.

### 5.6.1 Accounting treatment for goodwill

Accounting treatment for goodwill on admission of a partner is discussed below:

1. When new partner brings cash towards goodwill
2. When the new partner does not bring goodwill in cash or in kind
3. When the new partner brings only a part of the goodwill in cash or in kind
4. Existing goodwill

#### 1. When new partner brings cash towards goodwill

When the new partner brings cash towards goodwill in addition to the amount of capital, it is distributed to the existing partners in the sacrificing ratio. The following journal entries are to be made:

##### (i) For the goodwill brought in cash credited to old partners' capital account

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Cash / Bank A/c To Old partners' capital / current A/c (in sacrificing ratio)	Dr.	xxx	xxx

##### (ii) For the goodwill brought in kind (in the form of assets) credited to old partners' capital account

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Respective Asset A/c To Old partners' capital / current A/c (in sacrificing ratio)	Dr.	xxx	xxx

##### (iii) For withdrawal of cash received for goodwill by the old partners

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Old partners' capital / current A/c To Cash / Bank A/c	Dr.	xxx	xxx

### Illustration 18

Amudha and Bhuvana are partners who share profits and losses in the ratio of 5:3. Chithra joins the firm on 1st January, 2019 for  $\frac{3}{8}$  share of profits and brings in cash for her share of goodwill of ₹ 8,000. Pass necessary journal entry for adjusting goodwill on the assumption that the fluctuating capital method is followed and the partners withdraw the entire amount of their share of goodwill.

### Solution

As the sacrifice made by the existing partners is not mentioned, it is assumed that they sacrifice in their old profit sharing ratio 5:3. Therefore, sacrificing ratio is 5:3.

#### Journal Entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019 January 1	Bank A/c To Amudha's capital A/c (5/8) To Bhuvana's capital A/c (3/8) (Cash brought for goodwill credited to Amudha and Bhuvana in sacrificing ratio)	Dr.	8,000	5,000 3,000
„	Amudha's capital A/c Bhuvana's capital A/c To Bank A/c (Amount withdrawn by the partners)	Dr. Dr.	5,000 3,000	8,000

### Illustration 19

Arun, Babu and Charles are partners sharing profits and losses equally. They admit Durai into partnership for 1/4 share in future profits. The goodwill of the firm is valued at ₹ 36,000 and Durai brought cash for his share of goodwill. The existing partners withdraw half of the amount of their share of goodwill. Pass necessary journal entries on the assumption that the fluctuating capital method is followed.

### Solution

Durai's share of goodwill =  $36,000 \times 1/4 = ₹ 9,000$

As the sacrifice made by the existing partners is not mentioned, it is assumed that they sacrifice in their old profit sharing ratio 1:1:1. Therefore, sacrificing ratio is 1:1:1.

#### Journal Entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c To Arun's capital A/c To Babu's capital A/c To Charles's capital A/c (Cash brought for goodwill credited to old partners' capital account in sacrificing ratio)	Dr.	9,000	3,000 3,000 3,000

Arun's capital A/c	Dr.	1,500	
Babu's capital A/c	Dr.	1,500	
Charles's capital A/c	Dr.	1,500	
To Bank A/c			4,500
(Cash withdrawn by the partners)			

### Illustration 20

Vasu and Devi are partners sharing profits and losses in the ratio of 3:2. They admit Nila into partnership for 1/4 share of profit. Nila pays cash ₹ 3,000 towards her share of goodwill. The new ratio is 3:3:2. Pass necessary journal entry on the assumption that the fixed capital system is followed.

### Solution

Calculation of sacrificing ratio

Sacrificing ratio = Old share – New share

$$\text{Vasu} = \frac{3}{5} - \frac{3}{8} = \frac{24-15}{40} = \frac{9}{40}$$

$$\text{Devi} = \frac{2}{5} - \frac{3}{8} = \frac{16-15}{40} = \frac{1}{40}$$

Therefore, sacrificing ratio is 9:1

### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c	Dr.	3,000	
	To Vasu's current A/c (9/10)			2,700
	To Devi's current A/c (1/10)			300
	(Cash brought for goodwill credited to old partners' capital account in sacrificing ratio)			

### 2. When the new partner does not bring goodwill in cash or in kind

If the new partner does not bring goodwill in cash or in kind, his share of goodwill must be adjusted through the capital accounts of the partners. The following journal entry is passed.

Date	Particulars	L.F.	Debit ₹	Credit ₹
	New partners' capital A/c	Dr.	xxx	
	To Old partners' capital / current A/c (in sacrificing ratio)			xxx

### Illustration 21

Ashok and Mumtaj were partners in a firm sharing profits and losses in the ratio of 5:1. They have decided to admit Tharun into the firm for 2/9 share of profits. The goodwill of the firm on the date of admission was valued at ₹ 27,000. Tharun is not able to bring in cash for his share of goodwill. Pass necessary journal entries for goodwill on the assumption that the fluctuating capital system is followed.

#### Solution

As the sacrifice made by the existing partners is not mentioned, it is assumed that they sacrifice in their old profit sharing ratio of 5:1. Therefore, sacrificing ratio is 5:1.

$$\text{Tharun's share of goodwill} = 27,000 \times \frac{2}{9} = ₹ 6,000$$

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Tharun's capital A/c Dr.		6,000	
	To Ashok's capital A/c (5/6)			5,000
	To Mumtaj's capital A/c (1/6)			1,000
	(Tharun's share of goodwill credited to the old partners' capital account in the sacrificing ratio)			

### 3. When the new partner brings only a part of the goodwill in cash or in kind

Sometimes the new partner may bring only a part of the goodwill in cash or assets. In such a case, for the cash or the assets brought, the respective account is debited and for the amount not brought in cash or kind, the new partner's capital account is debited. The following journal entry is passed.

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Cash / Bank A/c Dr.		xxx	
	New partners' capital A/c Dr.		xxx	
	To Old partners' capital / current A/c (in sacrificing ratio)			xxx

### Illustration 22

Aravind and Balaji are partners sharing profits and losses in 3:2 ratio. They admit Anirudh into partnership. The new profit sharing ratio is agreed at 1:1:1. Anirudh's share of goodwill is valued at ₹ 20,000 of which he pays ₹ 12,000 in cash. Pass necessary journal entries for goodwill on the assumption that the fluctuating capital method is followed.



### Solution

#### Calculation of sacrificing ratio

Sacrificing ratio = Old share – New share

$$\text{Aravind} = \frac{3}{5} - \frac{1}{3} = \frac{9-5}{15} = \frac{4}{15}$$

$$\text{Balaji} = \frac{2}{5} - \frac{1}{3} = \frac{6-5}{15} = \frac{1}{15}$$

Therefore, sacrificing ratio is 4:1

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Cash A/c Dr.		12,000	
	Anirudh's capital A/c Dr.		8,000	
	To Aravind's capital A/c (4/5)			16,000
	To Balaji's capital A/c (1/5)			4,000
	(Share of goodwill of Anirudh credited to old partners' capital account)			

#### 4. Existing goodwill

If goodwill already appears in the books of accounts, at the time of admission if the partners decide, it can be written off by transferring it to the existing partners' capital account / current account in the old profit sharing ratio. The following journal entry is to be passed:

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Old partners' capital / current A/c (in old ratio) Dr.		xxx	
	To Goodwill A/c			xxx
	(Existing goodwill written off)			

#### Illustration 23

Sathish and Sudhan are partners in a firm sharing profits and losses in the ratio of 4:3. On 1st April 2018, they admitted Sasi as a partner. On the date of Sasi's admission, goodwill appeared in the books of the firm at ₹ 35,000. By assuming fluctuating capital account, pass the necessary journal entry if the partners decide to

- (i) write off the entire amount of existing goodwill
- (ii) write off ₹ 21,000 of the existing goodwill.

## Solution

### (i) To write off the entire amount of existing goodwill

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2018	Sathish's capital A/c (4/7) Dr.		20,000	
April 1	Sudhan's capital A/c (3/7) Dr.		15,000	
	To Goodwill A/c (Existing goodwill written off)			35,000

### (ii) To write off ₹ 21,000 of the existing goodwill

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2018	Sathish's capital A/c (21,000 x 4/7) Dr.		12,000	
April 1	Sudhan's capital A/c (21,000 x 3/7) Dr.		9,000	
	To Goodwill A/c (Existing goodwill written off to the extent of ₹ 21,000)			21,000



When goodwill is paid by the new partner to the old partners privately, no entry is made in the books of the partnership firm.

## 5.7 Adjustment of capital on the basis of new profit sharing ratio

Sometimes, it may be agreed by the partners that their capitals in the reconstituted firm be in the proportion of their new profit sharing ratio. There can be two situations.

The new partner may be required to bring proportionate capital for his share of profit. New partner's capital is calculated on the basis of the capital of the reconstituted firm or on the basis of combined capitals of the old partners for their share of profit.

The old partners may be required to make their capital in proportion to their new profit sharing ratio. Old partners' capital is calculated on the basis of the capital brought by the new partner for his share of profit. The deficiency or excess in the old partners' capital account may be adjusted through the current accounts or cash may be brought in or withdrawn by the partners.

## Comprehensive problems

### Illustration 24

Vetri and Ranjit are partners, sharing profits in the ratio of 3:2. Their balance sheet as on 31st December 2017 is as under:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Furniture	25,000
Vetri	30,000		Stock	20,000
Ranjit	20,000	50,000	Debtors	10,000
Reserve fund		5,000	Cash in hand	35,000
Sundry creditors		45,000	Profit and loss A/c (loss)	10,000
		1,00,000		1,00,000

On 1.1.2018, they admit Suriya into their firm as a partner on the following arrangements.

- Suriya brings ₹ 10,000 as capital for 1/4 share of profit.
- Stock to be depreciated by 10%
- Debtors to be revalued at ₹ 7,500.
- Furniture to be revalued at ₹ 40,000.
- There is an outstanding wages of ₹ 4,500 not yet recorded.

Prepare revaluation account, partners' capital account and the balance sheet of the firm after admission.

### Solution

Dr		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Stock A/c		2,000	By Furniture A/c	15,000	
To Debtors A/c		2,500			
To Outstanding wages A/c		4,500			
To Profit on revaluation transferred to capital A/c					
Vetri (3/5)	3,600				
Ranjit (2/5)	2,400	6,000			
		15,000			15,000

Dr.

## Capital Account

Cr.

Particulars	Vetri ₹	Ranjit ₹	Suriya ₹	Particulars	Vetri ₹	Ranjit ₹	Suriya ₹
To Profit and loss A/c	6,000	4,000	-	By Balance b/d	30,000	20,000	-
To Balance c/d	30,600	20,400	10,000	By Reserve fund A/c	3,000	2,000	-
				By Revaluation A/c	3,600	2,400	-
				By Cash A/c	-	-	10,000
	36,600	24,400	10,000		36,600	24,400	10,000
				By Balance b/d	30,600	20,400	10,000

## Balance Sheet as on 1st January 2018

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Furniture	25,000	
Vetri	30,600		Add: Appreciation	15,000	40,000
Ranjit	20,400		Stock	20,000	
Suriya	10,000	61,000	Less: Depreciation	2,000	18,000
Sundry creditors		45,000	Debtors	10,000	
Outstanding wages		4,500	Less: Decrease	2,500	7,500
			Cash in hand	35,000	
			Add: Suriya's capital	10,000	45,000
		1,10,500			1,10,500

## Illustration 25

The balance sheet of Rekha and Mary on 31st March 2018 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Buildings	50,000
Rekha	50,000		Stock	8,000
Mary	30,000	80,000	Sundry debtors	60,000
General reserve		40,000	Cash at bank	32,000
Workmen compensation fund		10,000		
Sundry creditors		20,000		
		1,50,000		1,50,000

They share the profits and losses in the ratio of 3:1. They agreed to admit Kavitha into the partnership firm for 1/4 share of profit which she gets entirely from Rekha.

Following are the conditions:

- (i) Kavitha has to bring ₹ 20,000 as capital. Her share of goodwill is valued at 4,000. She could not bring cash towards goodwill.
- (ii) Depreciate buildings by 10%
- (iii) Stock to be revalued at ₹ 6,000
- (iv) Create provision for doubtful debts at 5% on debtors

Prepare necessary ledger accounts and the balance sheet after admission.

### Solution

Dr.		Revaluation Account		Cr.	
Particulars	₹	Particulars	₹	₹	
To Buildings A/c	5,000	By Loss on revaluation transferred to			
To Stock A/c	2,000	Rekha's capital A/c (3/4)	7,500		
To Provision for bad debts A/c	3,000	Mary's capital A/c (1/4)	2,500	10,000	
	10,000			10,000	

Dr.		Capital Account			Cr.		
Particulars	Rekha ₹	Mary ₹	Kavitha ₹	Particulars	Rekha ₹	Mary ₹	Kavitha ₹
To Revaluation A/c	7,500	2,500	-	By Balance b/d	50,000	30,000	-
To Rekha's capital A/c (share of goodwill)	-	-	4,000	By Bank A/c	-	-	20,000
To Balance c/d	84,000	40,000	16,000	By General reserve A/c	30,000	10,000	-
				By Workmen compensation fund A/c	7,500	2,500	-
				By Kavitha's capital A/c (share of goodwill)	4,000	-	-
	91,500	42,500	20,000		91,500	42,500	20,000
				By Balance b/d	84,000	40,000	16,000

### Balance Sheet as on 1st April 2018

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Buildings	50,000	
Rekha	84,000		Less: Depreciation	5,000	45,000
Mary	40,000		Stock	8,000	
Kavitha	16,000	1,40,000	Less: Decrease	2,000	6,000
Sundry creditors		20,000	Sundry debtors	60,000	
			Less: Provision for doubtful debts	3,000	57,000
			Bank (32,000+20,000)		52,000
		1,60,000			1,60,000

#### Illustration 26

Ameer and Raja are partners sharing profits in the ratio of 3:2. Their balance sheet is shown as under on 31.12.2018.

Liabilities	₹	₹	Assets	₹
Capital accounts:			Machinery	60,000
Ameer	80,000		Furniture	40,000
Raja	70,000	1,50,000	Debtors	30,000
Reserve fund		15,000	Stock	10,000
Creditors		35,000	Prepaid insurance	40,000
			Cash at bank	20,000
		2,00,000		2,00,000

Rohit is admitted as a new partner who introduces a capital of ₹ 30,000 for his 1/5 share in future profits. He brings ₹ 10,000 for his share of goodwill.

Following revaluations are made:

- (i) Stock is to be appreciated to ₹ 14,000
- (ii) Furniture is to be depreciated by 5%
- (iii) Machinery is to be revalued at ₹ 80,000

Prepare the necessary ledger accounts and the balance sheet after the admission.

### Solution

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Furniture A/c		2,000	By Stock A/c	4,000	
To Profit on revaluation transferred to Ameer's capital A/c (3/5)	13,200		By Machinery A/c	20,000	
Raja's capital A/c (2/5)	8,800	<b>22,000</b>			
		24,000			24,000

Dr.		Capital Account				Cr.	
Particulars	Ameer ₹	Raja ₹	Rohit ₹	Particulars	Ameer ₹	Raja ₹	Rohit ₹
To Balance c/d	<b>1,08,200</b>	<b>88,800</b>	<b>30,000</b>	By Balance b/d	80,000	70,000	-
				By Bank A/c	-	-	30,000
				By Reserve fund A/c	9,000	6,000	-
				By Revaluation A/c	13,200	8,800	-
				By Bank A/c* (share of goodwill)	6,000	4,000	-
	1,08,200	88,800	30,000		1,08,200	88,800	30,000
				By Balance b/d	1,08,200	88,800	30,000

\***Note:** Since the sacrificing ratio is not given and the new partner's share is given, it is assumed that the old profit sharing ratio (3:2) is the sacrificing ratio and the new partner's share of goodwill is distributed to the old partners accordingly.

Dr.		Cash at bank Account		Cr.	
Date	Particulars	₹	Date	Particulars	₹
	To Balance b/d	20,000		By Balance c/d	<b>60,000</b>
	To Rohit's capital A/c	30,000			
	To Ameer's capital A/c	6,000			
	To Raja's capital A/c	4,000			
		<b>60,000</b>			<b>60,000</b>

### Balance Sheet as on 1st January 2019

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Machinery	60,000	
Ameer	1,08,200		Add: Appreciation	20,000	80,000
Raja	88,800		Furniture	40,000	
Rohit	30,000	2,27,000	Less: Depreciation	2,000	38,000
Creditors		35,000	Debtors		30,000
			Stock	10,000	
			Add: Appreciation	4,000	14,000
			Prepaid insurance		40,000
			Cash at bank		60,000
		2,62,000			2,62,000

#### Illustration 27

Veena and Pearl are partners in a firm sharing profits and losses in the ratio of 2:1. Their balance sheet as on 31st March, 2018 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts			Buildings	60,000
Veena	60,000		Machinery	30,000
Pearl	40,000	1,00,000	Debtors	20,000
General reserve		30,000	Stock	10,000
Workmen compensation fund		10,000	Cash at bank	30,000
Sundry creditors		10,000		
		1,50,000		1,50,000

Deri is admitted on 1.4.2018 subject to the following conditions:

- (a) The new profit sharing ratio among Veena, Pearl and Deri is 5:3:2.
- (b) Deri has to bring a capital of ₹ 30,000
- (c) Stock to be depreciated by 20%
- (d) Anticipated claim on workmen compensation fund is ₹ 1,000
- (e) Unrecorded investment of ₹ 11,000 has to be brought into books
- (f) The goodwill of the firm is valued at ₹ 30,000 and Deri brought cash for his share of goodwill. The existing partners withdraw the entire amount brought by Deri towards goodwill.

Prepare the necessary ledger accounts and balance sheet after admission.



### Solution

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Stock A/c		2,000	By Investments A/c	11,000	
To Profit on revaluation transferred to Veena's capital A/c (2/3)	6,000				
Pearl's capital A/c (1/3)	3,000	9,000			
		11,000		11,000	

Old ratio of Veena and Pearl = 2:1 that is,  $\frac{2}{3} : \frac{1}{3}$

New ratio of Veena, Pearl and Deri = 5:3:2 i.e.  $\frac{5}{10} : \frac{3}{10} : \frac{2}{10}$

Share sacrificed = Old share - New share

**Veena** =  $\frac{2}{3} - \frac{5}{10} = \frac{20-15}{30} = \frac{5}{30}$

**Pearl** =  $\frac{1}{3} - \frac{3}{10} = \frac{10-9}{30} = \frac{1}{30}$

Sacrificing ratio of Veena and Pearl = 5:1

Dr.		Capital Account			Cr.		
Particulars	Veena ₹	Pearl ₹	Deri ₹	Particulars	Veena ₹	Pearl ₹	Deri ₹
To Bank A/c	5,000	1,000	-	By Balance b/d	60,000	40,000	-
To Balance c/d	92,000	56,000	30,000	By Bank A/c	-	-	30,000
				By General reserve A/c	20,000	10,000	-
				By Workmen compensation fund A/c (10,000- 1,000)	6,000	3,000	-
				By Revaluation A/c	6,000	3,000	-
				By Bank A/c* (share of goodwill)	5,000	1,000	-
	97,000	57,000	30,000		97,000	57,000	30,000
				By Balance b/d	92,000	56,000	30,000

\* Goodwill of the firm is ₹ 30,000

Deri's share of goodwill =  $30,000 \times \frac{2}{10} = ₹ 6,000$

It is to be distributed to Veena and Pearl in their sacrificing ratio of 5:1

**Dr. Cash at bank Account Cr.**

Particulars	₹	Particulars	₹
To Balance b/d	30,000	By Veena's capital A/c	5,000
To Deri's capital A/c	30,000	By Pearl's capital A/c	1,000
To Veena's capital A/c	5,000	By Balance c/d	60,000
To Pearl's capital A/c	1,000		
	66,000		66,000

**Balance Sheet as on 1st April 2018**

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Buildings		60,000
Veena	92,000		Machinery		30,000
Pearl	56,000		Investments		11,000
Deri	30,000	1,78,000	Debtors		20,000
Workmen's compensation fund (10,000-9,000)			Stock	10,000	
Sundry creditors		10,000	Less: Decrease	2,000	8,000
		1,89,000	Cash at bank		60,000
					1,89,000

**Points to remember**

- ❖ On admission of a new partner, the firm is reconstituted with a new agreement and the existing agreement comes to an end.
- ❖ On admission of a partner, generally there is a change in the mutual rights of the partners. The new partner acquires the right to share the future profits and share the assets of the firm.
- ❖ The new partner becomes liable for all the acts which are carried out by the firm from the date of his / her admission into the firm.
- ❖ On admission of a partner, the accumulated profits, accumulated losses and reserves before admission are to be distributed to the existing partners in the old ratio.
- ❖ When a partner is admitted into the firm, assets and liabilities are to be revalued and the profit or loss on revaluation is to be distributed to the existing partners in the old ratio.



- ❖ At the time of admission of a partner it is necessary to determine the new profit sharing ratio because the new partner is entitled to share the future profits of the firm.
- ❖ If the new profit sharing ratio is not agreed, the partners will share the profits and losses equally.
- ❖ The existing partners sacrifice part of their share of profit in favour of the new partner. To compensate the sacrifice made by the existing partners, goodwill brought by the new partner is distributed in the sacrificing ratio to the old partners who sacrifice.
- ❖ Sacrificing ratio is the proportion of the profit which is sacrificed or foregone by the old partners in favour of the new partner.

### Self-examination questions

#### I Multiple Choice questions

Choose the correct answer



1. Revaluation A/c is a
  - (a) Real A/c
  - (b) Nominal A/c
  - (c) Personal A/c
  - (d) Impersonal A/c
2. On revaluation, the increase in the value of assets leads to
  - (a) Gain
  - (b) Loss
  - (c) Expense
  - (d) None of these
3. The profit or loss on revaluation of assets and liabilities is transferred to the capital account of
  - (a) The old partners
  - (b) The new partner
  - (c) All the partners
  - (d) The Sacrificing partners
4. If the old profit sharing ratio is more than the new profit sharing ratio of a partner, the difference is called
  - (a) Capital ratio
  - (b) Sacrificing ratio
  - (c) Gaining ratio
  - (d) None of these
5. At the time of admission, the goodwill brought by the new partner may be credited to the capital accounts of
  - (a) all the partners
  - (b) the old partners
  - (c) the new partner
  - (d) the sacrificing partners

6. Which of the following statements is not true in relation to admission of a partner
- Generally mutual rights of the partners change
  - The profits and losses of the previous years are distributed to the old partners
  - The firm is reconstituted under a new agreement
  - The existing agreement does not come to an end
7. Match List I with List II and select the correct answer using the codes given below:

List I

List II

- |                               |                                |
|-------------------------------|--------------------------------|
| (i) Sacrificing ratio         | 1. Investment fluctuation fund |
| (ii) Old profit sharing ratio | 2. Accumulated profit          |
| (iii) Revaluation Account     | 3. Goodwill                    |
| (iv) Capital Account          | 4. Unrecorded liability        |

Codes:

- |       |      |       |      |
|-------|------|-------|------|
| (i)   | (ii) | (iii) | (iv) |
| (a) 1 | 2    | 3     | 4    |
| (b) 3 | 2    | 4     | 1    |
| (c) 4 | 3    | 2     | 1    |
| (d) 3 | 1    | 2     | 4    |

8. Select the odd one out
- |                                     |                                 |
|-------------------------------------|---------------------------------|
| (a) Revaluation profit              | (b) Accumulated loss            |
| (c) Goodwill brought by new partner | (d) Investment fluctuation fund |
9. James and Kamal are sharing profits and losses in the ratio of 5:3. They admit Sunil as a partner giving him  $\frac{1}{5}$  share of profits. Find out the sacrificing ratio.
- |         |         |
|---------|---------|
| (a) 1:3 | (b) 3:1 |
| (c) 5:3 | (d) 3:5 |
10. Balaji and Kamalesh are partners sharing profits and losses in the ratio of 2:1. They admit Yogesh into partnership. The new profit sharing ratio between Balaji, Kamalesh and Yogesh is agreed to 3:1:1. Find the sacrificing ratio between Balaji and Kamalesh.
- |         |         |
|---------|---------|
| (a) 1:3 | (b) 3:1 |
| (c) 2:1 | (d) 1:2 |

**Answer**

1. (b)	2. (a)	3. (a)	4. (b)	5. (d)	6. (d)	7. (b)	8. (c)	9. (c)	10. (d)
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## II Very short answer questions

1. What is meant by revaluation of assets and liabilities?
2. How are accumulated profits and losses distributed among the partners at the time of admission of a new partner?
3. What is sacrificing ratio?
4. Give the journal entry for writing off existing goodwill at the time of admission of a new partner.
5. State whether the following will be debited or credited in the revaluation account.
  - (a) Depreciation on assets
  - (b) Unrecorded liability
  - (c) Provision for outstanding expenses
  - (d) Appreciation of assets

## III Short answer questions

1. What are the adjustments required at the time of admission of a partner?
2. What are the journal entries to be passed on revaluation of assets and liabilities?
3. Write a short note on accounting treatment of goodwill.

## IV Exercises

### Distribution of accumulated profits, reserves and losses

1. Arul and Anitha are partners sharing profits and losses in the ratio of 4:3. On 31.3.2018, Ajay was admitted as a partner. On the date of admission, the book of the firm showed a general reserve of ₹ 42,000. Pass the journal entry to distribute the general reserve.

**(Answer: Arul: ₹ 24,000(Cr.); Anitha: ₹ 18,000 (Cr.))**

2. Anjali and Nithya are partners of a firm sharing profits and losses in the ratio of 5:3. They admit Pramila on 1.1.2018. On that date, their balance sheet showed accumulated loss of ₹40,000 on the asset side of the balance sheet. Give the journal entry to transfer the accumulated loss on admission.

**(Answer: Profit and loss: Anjali: ₹ 25,000 (Dr.); Nithya: ₹ 15,000 (Dr.))**

3. Oviya and Kavya are partners in a firm sharing profits and losses in the ratio of 5:3. They admit Agalya into the partnership. Their balance sheet as on 31st March, 2019 is as follows:

**Balance Sheet as on 31st March 2019**

Liabilities		₹	Assets	₹
Capital accounts:			Buildings	40,000
Oviya	50,000		Plant	50,000
Kavya	40,000	90,000	Furniture	30,000
Profit and loss appropriation A/c		40,000	Debtors	20,000
General reserve		8,000	Stock	10,000
Workmen's compensation fund		12,000	Cash	20,000
Sundry creditors		20,000		
		1,70,000		1,70,000

Pass journal entry to transfer the accumulated profits and reserve on admission.

**(Answer: Oviya: ₹ 37,500; Kavya: ₹ 22,500)**

**Revaluation of assets and liabilities**

4. Hari, Madhavan and Kesavan are partners, sharing profits and losses in the ratio of 5:3:2. As from 1st April 2017, Vanmathi is admitted into the partnership and the new profit sharing ratio is decided as 4:3:2:1. The following adjustments are to be made.

- (a) Increase the value of premises by ₹ 60,000.
- (b) Depreciate stock by ₹ 5,000, furniture by ₹ 2,000 and machinery by ₹ 2,500.
- (c) Provide for an outstanding liability of ₹ 500.

Pass journal entries and prepare revaluation account.

**(Answer: Revaluation profit: ₹ 50,000)**

5. Seenu and Siva are partners sharing profits and losses in the ratio of 5:3. In the view of Kowsalya admission, they decided

- (a) To increase the value of building by ₹ 40,000.
- (b) To bring into record investments at ₹ 10,000, which have not so far been brought into account.
- (c) To decrease the value of machinery by ₹ 14,000 and furniture by ₹ 12,000.
- (d) To write off sundry creditors by ₹ 16,000.

Pass journal entries and prepare revaluation account.

**(Answer: Revaluation profit: ₹ 40,000)**

6. Sai and Shankar are partners, sharing profits and losses in the ratio of 5:3. The firm's balance sheet as on 31st December, 2017, was as follows:

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Building		34,000
Sai	48,000		Furniture		6,000
Shankar	40,000	88,000	Investment		20,000
Creditors		37,000	Debtors	40,000	
Outstanding wages		8,000	Less: Provision for bad debts	3,000	37,000
			Bills receivable		12,000
			Stock		16,000
			Bank		8,000
		1,33,000			1,33,000

On 31st December, 2017 Shanmugam was admitted into the partnership for 1/4 share of profit with ₹ 12,000 as capital subject to the following adjustments.

- Furniture is to be revalued at ₹ 5,000 and building is to be revalued at ₹ 50,000.
- Provision for doubtful debts is to be increased to ₹5,500
- An unrecorded investment of ₹ 6,000 is to be brought into account
- An unrecorded liability ₹ 2,500 has to be recorded now.

Pass journal entries and prepare Revaluation Account and capital account of partners after admission.

**(Answer: Revaluation Profit: ₹ 16,000; Capital accounts: Sai: ₹ 58,000(Cr.),  
Shankar: ₹ 46,000(Cr.); Shanmugam: ₹ 12,000(Cr.)**

7. Amal and Vimal are partners in a firm sharing profits and losses in the ratio of 7:5. Their balance sheet as on 31st March, 2019, is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Land	80,000
Amal	70,000		Furniture	20,000
Vimal	50,000	1,20,000	Stock	25,000
Sundry creditors		30,000	Debtors	30,000
Profit and loss A/c		24,000	Bank	19,000
		1,74,000		1,74,000

Nirmal is admitted as a new partner on 1.4.2018 by introducing a capital of ₹ 30,000 for 1/3 share in the future profit subject to the following adjustments.

- (a) Stock to be depreciated by ₹5,000
- (b) Provision for doubtful debts to be created for ₹3,000
- (c) Land to be appreciated by ₹ 20,000

Prepare revaluation account and capital account of partners after admission.

**(Answer: Revaluation Profit: ₹ 12,000; Capital accounts: Amal ₹91,000(Cr.), Vimal ₹65,000(Cr.), Nirmal ₹30,000(Cr.))**

### Computation of sacrificing ratio and new profit sharing ratio

8. Praveena and Dhanya are partners sharing profits in the ratio of 7:3. They admit Malini into the firm. The new ratio among Praveena, Dhanya and Malini is 5:2:3. Calculate the sacrificing ratio.

**(Answer: Sacrificing ratio 2:1)**

9. Ananth and Suman are partners sharing profits and losses in the ratio of 3:2. They admit Saran for 1/5 share, which he acquires entirely from Ananth. Find out the new profit sharing ratio and sacrificing ratio.

**(Answer: New profit sharing ratio 2:2:1; Sacrificing ratio 1:0)**

10. Raja and Ravi are partners, sharing profits in the ratio of 3:2. They admit Ram for 1/4 share of the profit. He takes 1/20 share from Raja and 4/20 from Ravi. Calculate the new profit sharing ratio and sacrificing ratio.

**(Answer: New profit sharing ratio 11:4:5; Sacrificing ratio 1:4)**

11. Vimala and Kamala are partners, sharing profits and losses in the ratio of 4:3. Vinitha enters into the partnership and she acquires 1/14 from Vimala and 1/14 from Kamala. Find out the new profit sharing ratio and sacrificing ratio.

**(Answer: New profit sharing ratio 7:5:2; Sacrificing ratio 1:1)**

12. Govind and Gopal are partners in a firm sharing profits in the ratio of 5:4. They admit Rahim as a partner. Govind surrenders 2/9 of his share in favour of Rahim. Gopal surrenders 1/9 of his share in favour of Rahim. Calculate the new profit sharing ratio and sacrificing ratio.

**(Answer: New profit sharing ratio 35:32:14; Sacrificing ratio 5:2)**

13. Prema and Chandra share profits in the ratio of 5:3. Hema is admitted as a partner. Prema surrendered 1/8 of her share and Chandra surrendered 1/8 of her share in favour of Hema. Calculate the new profit sharing ratio and sacrificing ratio.

**(Answer: New profit sharing ratio 35:21:8; Sacrificing ratio 5:3)**

14. Karthik and Kannan are equal partners. They admit Kailash with 1/4 share of the profit. Kailash acquired his share from old partners in the ratio of 7:3. Calculate the new profit sharing ratio and sacrificing ratio.

**(Answer: New profit sharing ratio 13:17:10; Sacrificing ratio 7:3)**



15. Selvam and Senthil are partners sharing profit in the ratio of 2:3. Siva is admitted into the firm with  $\frac{1}{5}$  share of profit. Siva acquires equally from Selvam and Senthil. Calculate the new profit sharing ratio and sacrificing ratio.

(Answer: New profit sharing ratio 3:5:2; Sacrificing ratio 1:1)

16. Mala and Anitha are partners, sharing profits and losses in the ratio of 3:2. Mercy is admitted into the partnership with  $\frac{1}{5}$  share in the profits. Calculate new profit sharing ratio and sacrificing ratio.

(Answer: New profit sharing ratio 12:8:5; Sacrificing ratio 3:2)

17. Ambika, Dharani and Padma are partners in a firm sharing profits in the ratio of 5:3:2. They admit Ramya for 25% profit. Calculate the new profit sharing ratio and sacrificing ratio.

(Answer: New profit sharing ratio 15:9:6:10; Sacrificing ratio 5:3:2)

### Adjustment for goodwill

18. Aparna and Priya are partners who share profits and losses in the ratio of 3:2. Brindha joins the firm for  $\frac{1}{5}$  share of profits and brings in cash for her share of goodwill of ₹ 10,000. Pass necessary journal entry for adjusting goodwill on the assumption that the fluctuating capital method is followed and the partners withdraw the entire amount of their share of goodwill.

(Answer: Share of goodwill: Aparna: ₹ 6,000; Priya: ₹ 4,000)

19. Deepak, Senthil and Santhosh are partners sharing profits and losses equally. They admit Jerald into partnership for  $\frac{1}{3}$  share in future profits. The goodwill of the firm is valued at ₹ 45,000 and Jerald brought cash for his share of goodwill. The existing partners withdraw half of the amount of their share of goodwill. Pass necessary journal entries for adjusting goodwill on the assumption that the fluctuating capital method is followed.

(Answer: Share of goodwill: Deepak: ₹ 5,000; Senthil: ₹5,000; Santhosh: ₹5,000)

20. Malathi and Shobana are partners sharing profits and losses in the ratio of 5:4. They admit Jayasri into partnership for  $\frac{1}{3}$  share of profit. Jayasri pays cash ₹ 6,000 towards her share of goodwill. The new ratio is 3:2:1. Pass necessary journal entry for adjusting goodwill on the assumption that the fixed capital method is followed.

(Answer: Share of goodwill: Malathi's current account: ₹2,000;  
Shobana's current account ₹4,000)

21. Anu and Arul were partners in a firm sharing profits and losses in the ratio of 4:1. They have decided to admit Mano into the firm for  $\frac{2}{5}$  share of profits. The goodwill of the firm on the date of admission was valued at ₹ 25,000. Mano is not able to bring in cash for his share of goodwill. Pass necessary journal entry for goodwill on the assumption that the fluctuating capital method is followed.

(Answer: Share of goodwill: Anu: ₹ 8,000; Arul: ₹ 2,000)

22. Varun and Barath are partners sharing profits and losses 5:4. They admit Dhamu into partnership. The new profit sharing ratio is agreed at 1:1:1. Dhamu's share of goodwill is valued at ₹ 15,000 of which he pays ₹10,000 in cash. Pass necessary journal entries for adjustment of goodwill on the assumption that the fluctuating capital method is followed.

(Answer: Share of goodwill: Varun: ₹10,000; Barath ₹ 5,000)

23. Sam and Jose are partners in a firm sharing profits and losses in the ratio of 3:2. On 1st April 2018, they admitted Joel as a partner. On the date of Joel's admission, goodwill appeared in the books of the firm at ₹ 30,000. By assuming fluctuating capital method, pass the necessary journal entry if the partners decide to

- write off the entire amount of existing goodwill
- write off ₹ 20,000 of the existing goodwill.

(Answer: Goodwill: (a) Sam ₹ 18,000(Dr.); Jose ₹ 12,000(Dr.)

(b) Sam ₹ 12,000(Dr.); Jose ₹ 8,000(Dr.)

### Comprehensive problems

24. Rajan and Selva are partners sharing profits and losses in the ratio of 3:1. Their balance sheet as on 31st March 2017 is as under:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Building	25,000
Rajan	30,000		Furniture	1,000
Selva	16,000	46,000	Stock	20,000
General reserve		4,000	Debtors	16,000
Creditors		37,500	Bills receivable	3,000
			Cash at bank	12,500
			Profit and loss account	10,000
		87,500		87,500

On 1.4.2017, they admit Ganesan as a new partner on the following arrangements:

- Ganesan brings ₹10,000 as capital for 1/5 share of profit.
- Stock and furniture is to be reduced by 10%, a reserve of 5% on debtors for doubtful debts is to be created.
- Appreciate buildings by 20%.

Prepare revaluation account, partners' capital account and the balance sheet of the firm after admission.

(Answer: Revaluation profit: ₹ 2,100; Capital accounts: Rajan: ₹ 27,075;

Selva: ₹ 15,025; Ganesan: ₹ 10,000; Balance sheet total: ₹ 89,600)

25. Sundar and Suresh are partners sharing profits in the ratio of 3:2. Their balance sheet as on 1st January, 2017 was as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Buildings	40,000
Sundar	30,000		Furniture	13,000
Suresh	20,000	50,000	Stock	25,000
Creditors		50,000	Debtors	15,000
General reserve		10,000	Bills receivable	14,000
Workmen compensation fund		15,000	Bank	18,000
		1,25,000		1,25,000

They decided to admit Sugumar into partnership for 1/4 share in the profits on the following terms:

- Sugumar has to bring in ₹ 30,000 as capital. His share of goodwill is valued at ₹ 5,000. He could not bring cash towards goodwill.
- That the stock be valued at ₹ 20,000.
- That the furniture be depreciated by ₹ 2,000.
- That the value of building be depreciated by 20%.

Prepare necessary ledger accounts and the balance sheet after admission.

**(Answer; Revaluation loss: ₹ 15,000; Capital accounts: Sundar: ₹ 39,000, Suresh ₹ 26,000, Sugumar ₹ 25,000; Balance sheet total: ₹ 1,40,000)**

26. The following is the balance sheet of James and Justina as on 1.1.2017. They share the profits and losses equally.

Liabilities	₹	₹	Assets	₹
Capital accounts:			Building	70,000
James	40,000		Stock	30,000
Justina	50,000	90,000	Debtors	20,000
Creditors		35,000	Bank	15,000
Reserve fund		15,000	Prepaid insurance	5,000
		1,40,000		1,40,000

On the above date, Balan is admitted as a partner with 1/5 share in future profits. Following are the terms for his admission:

- (i) Balan brings ₹ 25,000 as capital.
- (ii) His share of goodwill is ₹10, 000 and he brings cash for it.
- (iii) The assets are to be valued as under:

Building ₹ 80, 000; Debtors ₹ 18,000; Stock ₹ 33,000

Prepare necessary ledger accounts and the balance sheet after admission.

**(Answer: Revaluation profit: ₹ 11, 000; Capital accounts: James: ₹ 58, 000; Justina: ₹ 68, 000; Balan: ₹ 25,000; Balance sheet total: ₹ 1,86,000)**

27. Anbu and Shankar are partners in a business sharing profits and losses in the ratio of 3:2. The balance sheet of the partners on 31.03.2018 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Computer	40,000
Anbu	4,00,000		Motor car	1,60,000
Shankar	3,00,000	7,00,000	Stock	4,00,000
Profit and loss		1,20,000	Debtors	3,60,000
Creditors		1,20,000	Bank	40,000
Workmen compensation fund		60,000		
		10,00,000		10,00,000

Rajesh is admitted for 1/5 share on the following terms:

- (i) Goodwill of the firm is valued at ₹ 75,000 and Rajesh brought cash for his share of goodwill.
- (ii) Rajesh is to bring ₹ 1,50,000 as his capital.
- (iii) Motor car is valued at ₹ 2,00,000; stock at ₹ 3,80,000 and debtors at ₹ 3,50,000.
- (iv) Anticipated claim on workmen compensation fund is ₹10,000
- (v) Unrecorded investment of ₹ 5,000 has to be brought into account.

Prepare revaluation account, capital accounts and balance sheet after Rajesh's admission.

**(Answer: Revaluation profit: ₹15,000; Capital accounts: Anbu: ₹ 5,20,000; Shankar: ₹ 3,80,000; Rajesh: ₹ 1,50,000; Balance sheet total: ₹ 11,80,000)**



### Student activity 5.3

Read and analyse the following transactions. Fill in the following table by writing asset or liability and put a ✓ in the appropriate column. The first two transactions are done as examples.

- (1) The value of inventory should be revalued from ₹ 2,500 to ₹ 3,000.
- (2) Building revalued from ₹ 2,00,000 to ₹ 1,60,000
- (3) Creditors revalued from ₹ 2,000 to ₹ 1,800, as discount can be availed from creditors.
- (4) The value of furniture decreased by ₹ 2,000
- (5) A provision for outstanding wages would be created for ₹ 1,000
- (6) Vehicle revalued to ₹ 20,000 from ₹ 28,000
- (7) Outstanding salary would be created for ₹ 10,000
- (8) Provision for doubtful debts is to be created for ₹ 1,000
- (9) Land revalued from ₹ 2,00,000 to ₹ 2,50,000
- (10) Fixtures revalued from ₹ 20,000 to ₹ 22,000

Transaction number	Asset/liability	Increase	Decrease	Debit revaluation account	Credit revaluation account
1	Asset	✓			✓
2	Asset		✓	✓	
3					
4					
5					
6					
7					
8					
9					
10					

What do you conclude from the above activity? Show your understanding by filling in the table below. Write increase or decrease in the appropriate box. One box is filled in as an example.

Revaluation account	Debit	Credit
Asset	Decrease	?
Liability	?	?

  
**CASE STUDY**

Sita and Sumathy started a restaurant in a busy area by forming a partnership business. The restaurant attracted many customers due to its quality of food and customer service. By the end of second year, the restaurant started making profit. After five years, they had a plan to expand the restaurant by opening one more branch. One of their friends, Susan, has good marketing skills. So, Sita and Sumathy mutually agreed to admit Susan into the firm. But, the firm did not have any partnership deed. On admission, the assets and liabilities were revalued. The partners generated goodwill internally. Very soon, Susan with her marketing skills got a contract with a nearby office to supply food for all their employees. It resulted in more profit to the firm.

**Discuss on the following:**

1. Do you think Sita and Sumathy should have a partnership deed?
2. In the absence of a partnership deed, what is to be done?
3. What are the accounting adjustments to be made when Susan joins in an existing firm?
4. Can the firm record the internally generated goodwill?
5. Susan expects a share on the gain on revaluation. Is it possible for her to get a share?
6. Susan claims a commission on the new contract. Do you agree on this?

**To explore further**

Is it compulsory for the partners to continue in the business forever? What will happen if any one of the partners leaves the firm? Will the partnership cease to operate?

**Reference**

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# UNIT 6

## RETIREMENT AND DEATH OF A PARTNER

### Contents

#### Retirement of a partner

- 6.1 Introduction
- 6.2 Adjustments required on retirement of a partner
- 6.3 Distribution of accumulated profits, reserves and losses
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- 6.5 Determination of new profit sharing ratio and gaining ratio
- 6.6 Adjustment for goodwill
- 6.7 Adjustment for current year's profit or loss upto the date of retirement
- 6.8 Settlement of the amount due to the retiring partner

#### Death of a partner

- 6.9 Adjustments required on the death of a partner

### Points to recall

The following points are to be recalled before learning retirement and death of a partner:

- ◇ Meaning and features of partnership firm
- ◇ Partnership deed
- ◇ Partners' capital accounts
- ◇ Valuation of goodwill

### Learning objectives

To enable the students to

- ◇ Understand the accounting treatment at the time of retirement and death of a partner.
- ◇ Prepare the partnership accounts on retirement and death of a partner.

### Key terms to know

- ◇ Retirement of a partner
- ◇ Gaining ratio
- ◇ Executor's account



## RETIREMENT OF A PARTNER

### 6.1 Introduction



#### Student activity 6.1

Think of any three reasons for a partner for leaving a partnership firm.

When a partner leaves from a partnership firm, it is known as retirement. The reasons for the retirement of a partner may be illness, old age, better opportunity elsewhere, disagreement with other partners, etc. On retirement of a partner, existing agreement comes to an end. The firm is reconstituted and other partners continue the partnership firm with a new agreement. A partner who retires from the firm is called an outgoing partner or a retiring partner.

Section 32(1) of The Indian Partnership Act, 1932 states that a partner may retire from the firm

- (a) with the consent of all the other partners,
- (b) in accordance with an express agreement by the partners, or
- (c) where the partnership is at will, by giving notice in writing to all the other partners of his intention to retire.

The retiring partner is liable for all the acts of the firm up to the date of his retirement. It is necessary for the retiring partner to give a public notice of his retirement from the firm to get relieved from the liabilities to the third parties for the acts of the firm after the retirement. The remaining partners must settle the amount due to the retiring partner.

### 6.2 Adjustments required on retirement of a partner

On retirement of a partner, generally the mutual rights of the continuing partners change. The retiring partner is liable for all the acts which are carried out by the firm until the date of his retirement from the firm. Hence, the accumulated profits, losses and reserves upto the date of his retirement is to be distributed to all the partners. Assets and liabilities have to be revalued and the profit or loss on revaluation is to be distributed to all the partners. The following adjustments are necessary at the time of retirement of a partner:

- (1) Distribution of accumulated profits, reserves and losses
- (2) Revaluation of assets and liabilities
- (3) Determination of new profit sharing ratio and gaining ratio
- (4) Adjustment for goodwill
- (5) Adjustment for current year's profit or loss upto the date of retirement
- (6) Settlement of the amount due to the retiring partner

**Tutorial note:** All these adjustments are similar to the adjustments to be done on admission of a partner except determination of profit sharing ratio and settlement of the amount due to the retiring partner.



### 6.3 Distribution of accumulated profits, reserves and losses

Profits and losses of previous years which are not distributed to the partners are known as accumulated profits and losses. Reserve includes general reserve, reserve fund, workmen compensation fund and investment fluctuation fund. As the accumulated profits and losses belong to all the partners, these should be distributed to all the partners in the old profit sharing ratio. In case of workmen compensation fund, the excess amount after providing for anticipated claim is to be transferred. Following are the journal entries to be passed:

#### (a) For transferring accumulated profits and reserves

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Profit and loss Appropriation A/c	Dr.	xxx	
	General reserve A/c	Dr.	xxx	
	Reserve fund A/c	Dr.	xxx	
	Workmen compensation fund A/c	Dr.	xxx	
	Investment fluctuation fund A/c	Dr.	xxx	
	To All partners' capital / current A/c (in the old ratio)			xxx

#### (b) For transferring accumulated loss

Date	Particulars	L.F.	Debit ₹	Credit ₹
	All partners' capital / current A/c	Dr.	xxx	
	To Profit and loss A/c (in old ratio)			xxx

#### Illustration 1

Vivin, Hari and Joy are partners sharing profits and losses in the ratio of 3:2:1. On 31.3.2017, Hari retired. On the date of retirement, the books of the firm showed a general reserve of ₹ 60,000. Pass the journal entry to transfer the general reserve.

#### Solution

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2017	General reserve A/c	Dr.	60,000	
March 31	To Vivin's capital A/c (60,000 × 3/6)			30,000
	To Hari's capital A/c (60,000 × 2/6)			20,000
	To Joy's capital A/c (60,000 × 1/6)			10,000
	(General reserve transferred to all partners' capital account in the old profit sharing ratio)			

## Illustration 2

Mary, Meena and Mariam are partners of a firm sharing profits and losses equally. Mary retired from the partnership on 1.1.2019. On that date, their balance sheet showed accumulated loss of ₹ 75,000 on the asset side of the balance sheet. Give the journal entry to distribute the accumulated loss.

### Solution

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019	Mary's capital A/c	Dr.	25,000	
January 1	Meena's capital A/c	Dr.	25,000	
	Mariam's capital A/c	Dr.	25,000	
	To Profit and loss a/c			75,000
	(Accumulated loss transferred to all partners' capital account in the old profit sharing ratio)			

## Illustration 3

Prince, Dev and Sasireka are partners in a firm sharing profits and losses in the ratio of 2:4:1. Their balance sheet as on 31<sup>st</sup> March, 2019 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts			Buildings	40,000
Prince	30,000		Plant	50,000
Dev	50,000		Furniture	10,000
Sasireka	20,000	1,00,000	Stock	15,000
Profit and loss appropriation A/c		10,000	Debtors	20,000
General reserve		15,000	Cash at bank	15,000
Workmen compensation fund		17,000		
Sundry creditors		8,000		
		1,50,000		1,50,000

## Solution

### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019	Profit and loss appropriation A/c	Dr.	10,000	
March 31	General reserve A/c	Dr.	15,000	
	Workmen compensation fund A/c	Dr.	17,000	
	To Prince's capital A/c (42,000 × 2/7)			12,000
	To Dev's capital A/c (42,000 × 4/7)			24,000
	To Sasireka's capital A/c (42,000 × 1/7)			6,000
	(Accumulated profits and reserve transferred to all partners' capital account in the old profit sharing ratio)			

## 6.4 Revaluation of assets and liabilities

When a partner retires from the partnership firm, the assets and liabilities are revalued as the current value may differ from the book value. There are two ways in which the revaluation of assets and liabilities may be dealt with in the accounts.

- Revised value of assets and liabilities are shown in the books
- Revised value of assets and liabilities are not shown in the books

### (a) When revised value of assets and liabilities are shown in the books:

Under this method, the assets and liabilities are shown at their revised values in the books and in the balance sheet which is prepared immediately after the retirement of a partner. A revaluation account is opened to record the increase or decrease in the value of assets and liabilities. Revaluation account which is otherwise called profit and loss adjustment account is a nominal account. Revaluation account is credited with increase in value of assets and decrease in the value of liabilities. It is debited with decrease in value of assets and increase in the value of liabilities. Unrecorded assets if any are credited and unrecorded liabilities if any are debited to the revaluation account. The profit or loss arising therefrom is transferred to the capital accounts of all the partners in the old profit sharing ratio.

Following are the journal entries to be passed to record the revaluation of assets and liabilities:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	<b>1. For increase in the value of asset</b>			
	Concerned asset A/c To Revaluation A/c	Dr.	xxx	xxx
	<b>2. For decrease in the value of asset</b>			
	Revaluation A/c To Concerned asset A/c	Dr.	xxx	xxx
	<b>3. For increase in the amount of liabilities</b>			
	Revaluation A/c To Concerned liability A/c	Dr.	xxx	xxx
	<b>4. For decrease in the amount of liability</b>			
	Concerned liability A/c To Revaluation A/c	Dr.	xxx	xxx
	<b>5. For recording an unrecorded asset</b>			
	Concerned asset A/c To Revaluation A/c	Dr.	xxx	xxx
	<b>6. For recording an unrecorded liability</b>			
	Revaluation A/c To Concerned liability A/c	Dr.	xxx	xxx
	<b>7. For transferring the balance in revaluation A/c</b>			
	<b>(a) For profit on revaluation</b>			
	Revaluation A/c To All partners' capital A/c (individually in old profit sharing ratio)	Dr.	xxx	xxx
	<b>(b) For loss on revaluation</b>			
	All partner's capital A/c (individually in old profit sharing ratio) To Revaluation A/c	Dr.	xxx	xxx

Format of revaluation account is as follows:

Dr.		Revaluation Account		Cr.	
Particulars	₹	Particulars	₹		
To Concerned asset A/c (net decrease)	xxx	By Concerned asset A/c (net increase)	xxx		
To Concerned liability A/c (net increase)	xxx	By Concerned liability A/c (net decrease)	xxx		
To All partners' capital A/c (profit on revaluation shared in old ratio) *	xxx	By All partners' capital A/c (loss on revaluation shared in old ratio)*	xxx		
	xxx		xxx		

\*There will be either profit or loss on revaluation.

#### Illustration 4

Ramya, Sara and Thara are partners sharing profits and losses in the ratio of 5:3:2. On 1<sup>st</sup> April 2018, Thara retires and on retirement, the following adjustments are agreed upon:

- Increase the value of premises by ₹ 40,000.
- Depreciate stock by ₹ 3,000 and machinery by ₹ 6,500.
- Provide an outstanding liability of ₹ 500

Pass journal entries and prepare revaluation account.

#### Solution

#### Journal Entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
2018 April 1	Premises A/c To Revaluation A/c (Value of premises increased)	Dr.	40,000	40,000
„	Revaluation A/c To Stock A/c To Machinery A/c To Outstanding liability A/c (Decrease in value of assets and outstanding liability recorded)	Dr.	10,000	3,000 6,500 500
„	Revaluation A/c To Ramya's capital A/c To Sara's capital A/c To Thara's capital A/c (Profit on revaluation distributed)	Dr.	30,000	15,000 9,000 6,000

Dr.		Revaluation account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Stock A/c		3,000	By Premises A/c	40,000	
To Machinery A/c		6,500			
To Outstanding liability A/c		500			
To Profit on revaluation transferred to					
Ramya's capital A/c (5/10)	15,000				
Sara's capital A/c (3/10)	9,000				
Thara's capital A/c (2/10)	6,000	<b>30,000</b>			
		40,000			40,000



### Student activity 6.2

Write any four transactions that may increase the profit on revaluation .

### Illustration 5

Prabu, Ragu and Siva are partners sharing profits and losses in the ratio of 3:2:1. Prabu retires from partnership on 1<sup>st</sup> April 2017. The following adjustments are to be made:

- Increase the value of building by ₹ 12,000
- Reduce the value of furniture by ₹ 8,500
- A provision would also be made for outstanding salary for ₹ 6,500.

Give journal entries and prepare revaluation account.

### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
2017 April 1	Building A/c To Revaluation A/c (Increase in the value of building accounted)	Dr.	12,000	12,000
„	Revaluation A/c To Furniture A/c To Outstanding salary A/c (Reduction in the value of furniture and outstanding salary accounted)	Dr.	15,000	8,500 6,500
„	Prabu's capital A/c Ragu's capital A/c Siva's capital A/c To Revaluation A/c (Loss on revaluation transferred to capital accounts)	Dr. Dr. Dr.	1,500 1,000 500	3,000

Dr.		Revaluation Account		Cr.	
Particulars	₹	Particulars			₹
To Furniture A/c	8,500	By Building A/c			12,000
To Outstanding salary A/c	6,500	By Loss on revaluation transferred to			
		Prabu's capital A/c (3/6)	1,500		
		Ragu's capital A/c (2/6)	1,000		
		Siva's capital A/c (1/6)	500		3,000
	15,000				15,000

### Illustration 6

John, James and Raja are partners in a firm sharing profits and losses equally. Their balance sheet as on 31<sup>st</sup> March, 2019 is as follows:

Liabilities		₹	Assets		₹
Capital accounts:			Office equipment		70,000
John	80,000		Machinery		1,40,000
James	60,000		Sundry debtors	52,000	
Raja	1,00,000	2,40,000	Less: Provision for		
Sundry creditors		1,20,000	doubtful debts	2,000	50,000
			Stock		60,000
			Cash at bank		40,000
		3,60,000			3,60,000

Raja retired on 31<sup>st</sup> March, 2019 subject to the following conditions:

- Machinery is valued at ₹ 1,30,000
- Value of office equipment is brought down by ₹ 2,000
- Provision for doubtful debts should be increased to ₹ 3,000
- Investment of ₹ 25,000 not recorded in the books is to be recorded now

Pass necessary journal entries and prepare revaluation account.

### Solution

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019 March 31	Revaluation A/c To Machinery A/c To Office equipment A/c To Provision for doubtful debts A/c (Depreciation on machinery and furniture and provision made for doubtful debts adjusted)	Dr.	13,000	10,000 2,000 1,000

„	Investments A/c To Revaluation A/c (Unrecorded investments brought into accounts)	Dr.	25,000	25,000
„	Revaluation A/c To John's capital A/c To James's capital A/c To Raja's capital A/c (Profit on revaluation transferred to capital accounts)	Dr.	12,000	4,000 4,000 4,000

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Machinery A/c		10,000	By Investments A/c	25,000	
To Office equipment A/c		2,000			
To Provision for doubtful debts		1,000			
To Profit on revaluation transferred to					
John's Capital A/c (1/3)	4,000				
James Capital A/c (1/3)	4,000				
Raja's Capital A/c (1/3)	4,000	12,000			
		25,000			25,000

### (b) When revised values of assets and liabilities are not shown in the books:

Under this method, the assets and liabilities are shown at their original values and not at the revised values in the books and in the balance sheet which is prepared immediately after the retirement of a partner. The net result of revaluation is adjusted through the capital accounts of the partners. A Memorandum revaluation account which is a temporary account is opened when the revised values are not to be shown in the books of accounts.

## 6.5 Determination of new profit sharing ratio and gaining ratio

### 6.5.1 New profit sharing ratio

It is necessary to determine the new profit sharing ratio at the time of retirement of a partner because the continuing partners acquire the retiring partner's share of profit. New profit sharing ratio is the agreed proportion in which future profit will be distributed to the continuing partners. If the new profit sharing ratio is not agreed, the continuing partners will share the profits and losses equally.



## 6.5.2 Gaining ratio

The continuing partners may gain a portion of the share of profit of the retiring partner. The gain may be shared by all the partners or some of the partners. Gaining ratio is the proportion of the profit which is gained by the continuing partners. The purpose of finding the gaining ratio is to bear the goodwill to be paid to the retiring partner. The share gained is calculated as follows:

$$\text{Share gained} = \text{New share} - \text{Old share}$$

$$\text{Gaining ratio} = \text{Ratio of share gained by the continuing partners}$$

**Tutorial note:** When the new profit sharing ratio is not given in the problem, it is to be calculated based on the information given in the problem.

### Calculation of gaining ratio and new profit sharing ratio under different situations

#### 1. When new profit sharing ratio is given

When new profit sharing ratio is given, only gaining ratio has to be calculated as follows:

$$\text{Gaining ratio} = \text{Ratio of share gained by the continuing partners}$$

$$\text{Share gained} = \text{New share} - \text{Old share}$$

#### Illustration 7

Kiran, Vinoth and Vimal are partners sharing profits in the ratio of 5:3:2. Kiran retires and the new profit sharing ratio between Vinoth and Vimal is 2:1. Calculate the gaining ratio.

#### Solution

$$\text{Share gained} = \text{New share} - \text{Old share}$$

$$\text{Vinoth} = \frac{2}{3} - \frac{3}{10} = \frac{20-9}{30} = \frac{11}{30}$$

$$\text{Vimal} = \frac{1}{3} - \frac{2}{10} = \frac{10-6}{30} = \frac{4}{30}$$

Therefore, the gaining ratio of Vinoth and Vimal is  $\frac{11}{30} : \frac{4}{30}$ , that is, 11:4

#### 2. When new profit sharing ratio is not given

##### (a) Only one partner gains the retiring partner's share

When new profit sharing ratio is not given and only one continuing partner gains the entire share of the retiring partner, new profit sharing ratio is calculated as follows:

$$\text{New share of continuing partner} = \text{Old share} + \text{Share gained}$$

#### Illustration 8

Arya, Benin and Charles are partners sharing profits and losses in the ratio of 3:3:2. Charles retires and his share is taken up by Arya. Calculate the new profit sharing ratio and gaining ratio of Arya and Benin.

$$\text{Share gained by Arya} = \frac{2}{8}$$

$$\text{Gaining ratio} = \frac{2}{8} : 0 \text{ that is, } \frac{1}{4} : 0 \text{ or } 1:0$$

New share of continuing partner = Old share + Share gained

$$\text{Arya} = \frac{3}{8} + \frac{2}{8} = \frac{5}{8}$$

$$\text{Benin} = \frac{3}{8} + 0 = \frac{3}{8}$$

Therefore, new profit sharing ratio of Arya and Benin is  $\frac{5}{8} : \frac{3}{8}$  that is 5:3.

### (b) More than one partner gains the retiring partner's share

#### (i) Proportion of share gained on retiring partner's share is given

When new profit sharing ratio is not given, but the proportion of share gained on retiring partner's share is given, new profit sharing ratio is calculated as follows:

New share of continuing partners = Old share + Share gained

Share gained = Retiring partner's share  $\times$  Proportion of share gained

#### Illustration 9

Rahul, Ravi and Rohit are partners sharing profits and losses in the ratio of 5:3:2. Rohit retires and the share is taken by Rahul and Ravi in the ratio of 3:2. Find out the new profit sharing ratio and gaining ratio.

#### Solution

$$\text{Rohit's share} = \frac{2}{10}$$

Share gained = Retiring partner's share  $\times$  Proportion of share gained

$$\text{Rahul} = \frac{2}{10} \times \frac{3}{5} = \frac{6}{50}$$

$$\text{Ravi} = \frac{2}{10} \times \frac{2}{5} = \frac{4}{50}$$

$$\text{Gaining ratio} = \frac{6}{50} : \frac{4}{50} \text{ that is, } 3:2$$

New share of continuing partners = Old share + Share gained

$$\text{Rahul} = \frac{5}{10} + \frac{6}{50} = \frac{25+6}{50} = \frac{31}{50}$$

$$\text{Ravi} = \frac{3}{10} + \frac{4}{50} = \frac{15+4}{50} = \frac{19}{50}$$

The new profit sharing ratio of Rahul and Ravi is  $\frac{31}{50} : \frac{19}{50}$  that is 31:19.

### Illustration 10

Kumar, Kesavan and Manohar are partners sharing profits and losses in the ratio of  $\frac{1}{2}$ ,  $\frac{1}{3}$  and  $\frac{1}{6}$  respectively. Manohar retires and his share is taken up by Kumar and Kesavan equally. Find out the new profit sharing ratio and gaining ratio.

#### Solution

Gaining ratio is 1:1 as Manohar's share is taken up by Kumar and Kesavan equally.

$$\text{Manohar's share} = \frac{1}{6}$$

$$\text{Share gained} = \text{Retiring partner's share} \times \text{Proportion of share gained}$$

$$\text{Kumar} = \frac{1}{6} \times \frac{1}{2} = \frac{1}{12}$$

$$\text{Kesavan} = \frac{1}{6} \times \frac{1}{2} = \frac{1}{12}$$

Therefore, gaining ratio of Kumar and Kesavan is  $\frac{1}{12} : \frac{1}{12}$  that is 1:1.

New share of continuing partners = Old share + Share gained

$$\text{Kumar} = \frac{1}{2} + \frac{1}{12} = \frac{6+1}{12} = \frac{7}{12}$$

$$\text{Kesavan} = \frac{1}{3} + \frac{1}{12} = \frac{4+1}{12} = \frac{5}{12}$$

Therefore, new profit sharing ratio of Kumar and Kesavan is  $\frac{7}{12} : \frac{5}{12}$  that is 7:5.

#### (ii) Proportion of share gained is not given

When new profit sharing ratio, share gained and the proportion of share gained is not given, the new share is calculated by assuming that share gained is the proportion of the old share. Therefore, the new profit sharing ratio and the gaining ratio among the continuing partners is their old profit sharing ratio between them.

### Illustration 11

Raja, Roja and Pooja are partners sharing profits in the ratio of 4:5:3. Roja retires from the firm. Calculate the new profit sharing ratio and gaining ratio.

#### Solution

Since, new profit sharing ratio, share gained and the proportion of share gained is not given, the new share is calculated by assuming that the share gained is in the proportion of old ratio. Therefore, the new profit sharing ratio and the gaining ratio between the continuing partners, Raja and Pooja is their old profit sharing ratio, that is 4:3.

### 6.5.3 Differences between the sacrificing ratio and the gaining ratio

Basis	Sacrificing ratio	Gaining ratio
1. Meaning	It is the proportion of the profit which is sacrificed by the old partners in favour of a new partner.	It is the proportion of the profit which is gained by the continuing partners from the retiring partner.
2. Purpose	It is calculated to determine the amount to be adjusted towards goodwill for the sacrificing partners.	It is calculated to determine the amount to be adjusted towards goodwill for the gaining partners.
3. Time of calculation	It is calculated at the time of admission of a new partner.	It is calculated at the time of retirement of a partner.
4. Method of calculation	It is the difference between the old ratio and the new ratio  Sacrificing ratio = Old profit sharing ratio - New profit sharing ratio	It is the difference between the new ratio and the old ratio.  Gaining ratio = New profit sharing ratio - Old profit sharing ratio

### 6.6 Adjustment for goodwill

Reputation built up by a firm has an impact on the present and future profit to be earned by the firm. At the time of retirement of a partner, the continuing partners gain part of retiring partner's share of profit. Hence, the retiring partner's share of goodwill is to be valued and adjusted through the capital accounts of the gaining partners. The following journal entry is passed.

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Continuing partners' capital / current A/c (in gaining ratio) Dr.		xxx	
	To Retiring partner's capital / current A/c			xxx

#### Illustration 12

Suresh, Senthamarai and Raj were partners in a firm sharing profits and losses in the ratio of 3:2:1. Suresh retired from partnership. The goodwill of the firm on the date of retirement was valued at ₹ 36,000. Pass necessary journal entries for goodwill on the assumption that the fluctuating capital system is followed.

#### Solution

As the new profit sharing ratio and gain made by the continuing partners is not mentioned, it is assumed that they gain in their old profit sharing ratio of 2:1. Therefore, gaining ratio is 2:1.

$$\text{Suresh's share of goodwill} = 36,000 \times \frac{3}{6} = ₹ 18,000$$

### Journal Entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Senthamari's capital A/c (18,000 × 2/3)	Dr.	12,000	
	Raj's capital A/c (18,000 × 1/3)	Dr.	6,000	
	To Suresh's capital A/c			18,000
	(Suresh's share of goodwill adjusted)			

#### 6.6.1 Existing goodwill

If goodwill already appears in the balance sheet, at the time of retirement if the partners decide, it can be written off by transferring it to all the partners' capital account / current account in the old profit sharing ratio. The following journal entry is to be passed:

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
	All partners' capital / current A/c (in old ratio)	Dr.	xxx	
	To Goodwill A/c			xxx
	(Existing goodwill written off)			

#### Illustration 13

Naresh, Mani and Muthu are partners in a firm sharing profits and losses in the ratio of 2:2:1. On 31<sup>st</sup> March 2019, Muthu retires from the firm. On the date of Muthu's retirement, goodwill appeared in the books of the firm at ₹ 40,000. By assuming fluctuating capital method, pass the necessary journal entry if the partners decide to

- write off the entire amount of existing goodwill
- write off half of the amount of existing goodwill.

#### Solution

##### (a) Write off the entire amount of existing goodwill

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019	Naresh's capital A/c (40,000 × 2/5)	Dr.	16,000	
March 31	Mani's capital A/c (40,000 × 2/5)	Dr.	16,000	
	Muthu's capital A/c (40,000 × 1/5)	Dr.	8,000	
	To Goodwill A/c			40,000
	(Existing goodwill written off)			

(b) Write off half of the amount of existing goodwill, that is ₹ 20,000

**Journal entry**

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019	Naresh's capital A/c (20,000 × 2/5)	Dr.	8,000	
March 31	Mani's capital A/c (20,000 × 2/5)	Dr.	8,000	
	Muthu's capital A/c (20,000 × 1/5)	Dr.	4,000	
	To Goodwill A/c			20,000
	(Half of the existing goodwill written off)			

**6.7 Adjustment for current year's profit or loss upto the date of retirement**

When a partner retires in between in an accounting year, his share of the current year's profit or loss upto the date of retirement has to be distributed to him. It may be estimated based on the current year's turnover. Previous year's profit or the average of the past years' profit may also be taken as the base to estimate the current year's profit. The following journal entry is passed.

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Profit and loss Suspense A/c	Dr.	xxx	
	To Retiring partner's capital / current A/c			xxx
	(Retiring partner's current year share of profit credited to his capital account)			

**Note:** If there is loss the reverse entry is passed.

Profit and loss suspense account is closed by transferring to the profit and loss account at the end the accounting period.



Profit and loss suspense account is a temporary account opened to transfer the share of retiring or deceased partner's share in current year's profit or loss upto the date of retirement or death.

**Illustration 14**

Justina, Navi and Rithika are partners sharing profits and losses equally. On 31.3.2019, Rithika retired from the partnership firm. Profits of the preceding years is as follows:

2016: ₹ 5,000; 2017: ₹ 10,000 and 2018: ₹ 30,000

Find out the share of profit of Ritika for the year 2019 till the date of retirement if

- (a) Profit is to be distributed on the basis of the previous year's profit
- (b) Profit is to be distributed on the basis of the average profit of the past 3 years

Also pass necessary journal entries by assuming that partners' capitals are fluctuating.

### Solution

(a) If profit is to be distributed on the basis of the previous year's profit:

$$\text{Ritika's share of profit for 3 months} = 30,000 \times \frac{3}{12} \times \frac{1}{3} = ₹ 2,500$$

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019 March 31	Profit and loss Suspense A/c To Rithika's capital A/c (Rithika's current year share of profit credited to her capital account)	Dr.	2,500	2,500

(b) If profit is to be distributed on the basis of the average profit of the past 3 years:

$$\begin{aligned} \text{Average profit} &= \frac{5,000 + 10,000 + 30,000}{3} \\ &= 15,000 \end{aligned}$$

$$\text{Ritika's share of profit for 3 months} = 15,000 \times \frac{3}{12} \times \frac{1}{3} = ₹ 1,250$$

Date	Particulars	L.F.	Debit ₹	Credit ₹
2019 March 31	Profit and loss Suspense A/c To Rithika's capital A/c (Rithika's current year share of profit credited to her capital account)	Dr.	1,250	1,250

### 6.8 Settlement of the amount due to the retiring partner

The amount due to the retiring partner from the partnership firm is the balance of his capital account after making adjustments for goodwill, accumulated profits and losses, profit or loss on revaluation, remuneration due, etc. The settlement is to be done in the manner prescribed in the partnership deed. The amount due to the retiring partner may be settled in one of the following ways:

- (i) Paying the entire amount due immediately in cash
- (ii) Transfer the entire amount due, to the loan account of the partner
- (iii) Paying part of the amount immediately in cash and transferring the balance to the loan account of the partner

The journal entries to be made are as follows:

**(a) When the amount due is paid in cash immediately**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Retiring partner's capital A/c To Cash / Bank A/c	Dr.	xxx	xxx

**(b) When the amount due is not paid immediately in cash**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Retiring partner's capital A/c To Retiring partner's loan A/c	Dr.	xxx	xxx

**(c) When the amount due is partly paid in cash immediately**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Retiring partner's capital A/c To Cash / Bank A/c (amount paid) To Retiring partner's loan A/c	Dr.	xxx	xxx xxx

Retiring partner's loan account will appear on the liabilities side of the balance sheet prepared after retirement till it is completely settled.



**Student activity 6.3**

A partner retires from a partnership firm. The final amount due to him on his retirement from the partnership firm is ₹ 25,000. He receives ₹ 15,000 immediately and the balance is left with the firm. What impact will it have in the books of accounts after his retirement?



If the amount due to the retiring/deceased partner is not paid in cash immediately and if there is no contract entered into concerning settlement of account, then provisions of Section 37 of the Indian Partnership Act, 1932 will apply.

As per section 37, the retiring partner or the representatives of the retiring or deceased partner is entitled to choose any of the following options:

- (a) Share of profits attributable to the use of his share of property of the firm or
- (b) Interest at the rate of 6 per cent per annum on the amount of his share on the property of the firm.



### Illustration 15

Kavitha, Kumudha and Lalitha are partners sharing profits and losses in the ratio of 5:3:3 respectively. Kumudha retires from the firm on 31<sup>st</sup> December, 2018. On the date of retirement, her capital account shows a credit balance of ₹ 2,00,000. Pass journal entries if:

- (i) The amount due is paid off immediately by cheque.
- (ii) The amount due is not paid immediately.
- (iii) ₹ 70,000 is paid immediately by cheque.

### Solution

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
2018 Dec. 31	(i) Kumudha's capital A/c To Bank A/c (Amount due paid immediately)	Dr.	2, 00,000	2, 00,000
„	(ii) Kumudha's capital A/c To Kumudha's loan A/c (Amount due transferred to loan account)	Dr.	2,00,000	2,00,000
„	(iii) Kumudha's capital A/c To Bank A/c To Kumudha's loan A/c (₹ 70,000 paid and the balance transferred to loan account)	Dr.	2,00,000	70,000 1,30,000

### Illustration 16

Mani, Rama and Devan are partners in a firm sharing profits and losses in the ratio of 4:3:3. Their balance sheet as on 31<sup>st</sup> March, 2019 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Buildings	80,000
Mani	50,000		Stock	20,000
Rama	50,000		Furniture	70,000
Devan	50,000	1,50,000	Debtors	20,000
Sundry creditors		20,000	Cash in hand	10,000
Profit and loss A/c		30,000		
		2,00,000		2,00,000

Mani retired from the partnership firm on 31.03.2019 subject to the following adjustments:

- (i) Stock to be depreciated by ₹ 5,000
- (ii) Provision for doubtful debts to be created for ₹ 1,000.
- (iii) Buildings to be appreciated by ₹ 16,000
- (iv) The final amount due to Mani is not paid immediately

Prepare revaluation account and capital account of partners after retirement.

### Solution

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Stock A/c		5,000	By Buildings A/c	16,000	
To Provision for doubtful debts A/c		1,000			
To Profit on revaluation transferred to					
Mani's capital A/c (4/10)	4,000				
Rama's capital A/c (3/10)	3,000				
Devan's capital A/c (3/10)	3,000	<b>10,000</b>			
		16,000		16,000	

Dr.		Capital Account			Cr.		
Particulars	Mani ₹	Rama ₹	Devan ₹	Particulars	Mani ₹	Rama ₹	Devan ₹
To Mani's loan A/c	<b>66,000</b>			By Balance b/d	50,000	50,000	50,000
To Balance c/d		<b>62,000</b>	<b>62,000</b>	By Revaluation A/c	4,000	3,000	3,000
				By Profit and loss A/c	12,000	9,000	9,000
	66,000	62,000	62,000		66,000	62,000	62,000
				By Balance b/d		62,000	62,000

## Comprehensive problems

### Illustration 17

Charles, Muthu and Sekar are partners, sharing profits in the ratio of 3:4:2. Their balance sheet as on 31<sup>st</sup> December, 2018 is as under:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Furniture	20,000
Charles	30,000		Stock	40,000
Muthu	40,000		Debtors	30,000
Sekar	20,000	90,000	Cash at bank	42,000
Workmen compensation fund		27,000	Profit and loss A/c (loss)	18,000
Sundry creditors		33,000		
		1,50,000		1,50,000

On 1.1.2019, Charles retired from the partnership firm on the following arrangements.

- Stock to be appreciated by 10%
- Furniture to be depreciated by 5%
- To provide ₹ 1,000 for bad debts
- There is an outstanding repairs of ₹ 11,000 not yet recorded
- The final amount due to Charles was paid by cheque

Prepare revaluation account, partners' capital account and the balance sheet of the firm after retirement.

### Solution

Dr.	Revaluation Account		Cr.	
Particulars	₹	Particulars	₹	₹
To Furniture A/c	1,000	By Stock A/c		4,000
To Provision for bad debts A/c	1,000	By Loss on revaluation transferred to		
To Outstanding repairs	11,000	Charles capital A/c (3/9)	3,000	
		Muthu's capital A/c (4/9)	4,000	
		Sekar's capital A/c (2/9)	2,000	9,000
	13,000			13,000

Dr.				Cr.			
Capital Account							
Particulars	Charles ₹	Muthu ₹	Sekar ₹	Particulars	Charles ₹	Muthu ₹	Sekar ₹
To Profit and loss A/c	6,000	8,000	4,000	By Balance b/d	30,000	40,000	20,000
To Revaluation A/c (loss)	3,000	4,000	2,000	By Workmen's compensation fund	9,000	12,000	6,000
To Bank	30,000	-	-				
To Balance c/d		<b>40,000</b>	<b>20,000</b>				
	39,000	52,000	26,000		39,000	52,000	26,000
				By Balance b/d	-	40,000	20,000

### Balance Sheet as on 1st January 2019

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Furniture	20,000	
Muthu	40,000		Less: Depreciation	1,000	19,000
Sekar	20,000	60,000	Stock	40,000	
Sundry creditors		33,000	Add: Appreciation	4,000	44,000
Outstanding repairs		11,000	Debtors	30,000	
			Less: Provision for bad debts	1,000	29,000
			Cash at bank	42,000	
			Less: Amount paid to Charles	30,000	12,000
		<b>1,04,000</b>			<b>1,04,000</b>

### Illustration 18

Raghu, Ravi and Ramesh are partners in a firm sharing profits and losses in the ratio of 2:3:1. Their balance sheet as on 31<sup>st</sup> March, 2019 was as follows:

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Buildings		60,000
Raghu	30,000		Machinery		70,000
Ravi	40,000		Stock		20,000
Ramesh	20,000	90,000	Debtors	18,000	
Reserve fund		36,000	Less Provision for bad debts	1,000	17,000
Sundry creditors		50,000	Cash at bank		9,000
		<b>1,76,000</b>			<b>1,76,000</b>

Ramesh retires on 31.3.2019 subject to the following conditions:

- (i) Goodwill of the firm is valued at ₹ 24,000
- (ii) Machinery to be depreciated by 10%
- (iii) Buildings to be appreciated by 20%
- (iv) Stock to be appreciated by ₹ 2,000
- (v) Provision for bad debts to be raised by ₹ 1,000
- (vi) Final amount due to Ramesh is not paid immediately

Prepare the necessary ledger accounts and show the balance sheet of the firm after retirement.

**Solution**

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Machinery A/c		7,000	By Buildings A/c	12,000	
To Provision for bad debts A/c		1,000	By Stock A/c	2,000	
To Profit on revaluation transferred to					
Raghu's capital A/c (2/6)	2,000				
Ravi's capital A/c (3/6)	3,000				
Ramesh capital A/c (1/6)	1,000	<b>6,000</b>			
		14,000		14,000	

Dr.		Capital Account			Cr.		
Particulars	Raghu ₹	Ravi ₹	Ramesh ₹	Particulars	Raghu ₹	Ravi ₹	Ramesh ₹
To Ramesh's capital A/c	1,600	2,400	-	By Balance b/d	30,000	40,000	20,000
To Ramesh's loan A/c			31,000	By Reserve fund A/c	12,000	18,000	6,000
To Balance c/d	<b>42,400</b>	<b>58,600</b>	-	By Revaluation A/c	2,000	3,000	1,000
				By Raghu's capital A/c	-	-	1,600
				By Ravi's capital A/c	-	-	2,400
	44,000	61,000	31,000		44,000	61,000	31,000
				By Balance b/d	42,400	58,600	-

### Balance sheet as on 31st March 2019

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Buildings	60,000	
Raghu	42,400		Add: Appreciation	12,000	72,000
Ravi	58,600	1,01,000	Machinery	70,000	
Ramesh's loan		31,000	Less: Depreciation	7,000	63,000
Sundry creditors		50,000	Stock	20,000	
			Add: Appreciation	2,000	22,000
			Debtors	18,000	
			Less: Provision for bad debts	2,000	16,000
			Cash at bank		9,000
		1,82,000			1,82,000

#### Tutorial note

1. As new profit sharing ratio and proportion of gain is not given, it is assumed that the continuing partners gain in their old profit sharing ratio of 2:3.

2. Ramesh share of goodwill =  $24,000 \times \frac{1}{6} = ₹ 4,000$

Goodwill of Ramesh to be borne by

Raghu:  $4,000 \times \frac{2}{5} = ₹ 1,600$

Ravi :  $4,000 \times \frac{3}{5} = ₹ 2,400$

#### Illustration 19

Muthu, Murali and Manoj are partners in a firm and sharing profits and losses in the ratio 3:1:2. Their balance sheet as on 31<sup>st</sup> December, 2018 is given below:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Machinery	45,000
Muthu	20,000		Furniture	5,000
Murali	25,000		Debtors	30,000
Manoj	20,000	65,000	Stock	20,000
General reserve		6,000		
Creditors		29,000		
		1,00,000		1,00,000

Manoj retires on 31<sup>st</sup> December, 2018 subject to the following conditions:

- (i) Muthu and Murali will share profits and losses in the ratio of 3:2
- (ii) Assets are to be revalued as follows:  
Machinery ₹ 43,000, stock ₹ 27,000, debtors ₹ 28,000.
- (iii) Goodwill of the firm is valued at ₹ 30,000
- (iv) The final amount due to Manoj is not paid immediately

Prepare necessary ledger accounts and the balance sheet immediately after the retirement of Manoj.

### Solution

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Machinery A/c		2,000	By Stock A/c	7,000	
To Debtors A/c		2,000			
To Profit on revaluation transferred to					
Muthu's capital A/c	1,500				
Murali's capital A/c	500				
Manoj's capital A/c	1,000	3,000			
		7,000		7,000	

Dr.		Capital Account			Cr.		
Particulars	Muthu ₹	Murali ₹	Manoj ₹	Particulars	Muthu ₹	Murali ₹	Manoj ₹
To Manoj's capital A/c	3,000	7,000	-	By Balance b/d	20,000	25,000	20,000
To Manoj's loan A/c			33,000	By General reserve A/c	3,000	1,000	2,000
To Balance c/d	21,500	19,500		By Revaluation A/c (profit)	1,500	500	1,000
				By Muthu's capital A/c			3,000
				By Murali's capital A/c			7,000
	24,500	26,500	33,000		24,500	26,500	33,000
				By Balance b/d	21,500	19,500	

**Note:**

#### (i) Computation of gaining ratio

Share gained = New share – old share

$$\text{Muthu} = \frac{3}{5} - \frac{3}{6} = \frac{18-15}{30} = \frac{3}{30}$$



**Murali**

$$= \frac{2}{5} - \frac{1}{6} = \frac{12-5}{30} = \frac{7}{30}$$

Therefore, the gaining ratio of Muthu and Murali is 3:7

**(ii) Adjustment for goodwill**

Goodwill of the firm = ₹ 30,000

Share of goodwill to Manoj =  $30,000 \times \frac{2}{6} = ₹ 10,000$

It is to be adjusted in the capital accounts of Muthu and Murali in the gaining ratio of 3:7

That is,

**Muthu** :  $10,000 \times \frac{3}{10} = ₹ 3,000$

**Murali** :  $10,000 \times \frac{7}{10} = ₹ 7,000$

**Balance Sheet as on 31<sup>st</sup> December, 2018**

Liabilities	₹	₹	Assets	₹	₹
Capital accounts			Machinery	45,000	
Muthu	21,500		Less: Depreciation	2,000	43,000
Murali	19,500	41,000	Furniture		5,000
Manoj's loan A/c		33,000	Debtors	30,000	
Creditors		29,000	Less: Provision for bad debts	2,000	28,000
			Stock	20,000	
			Add: Appreciation	7,000	27,000
		1,03,000			1,03,000

**DEATH OF A PARTNER**

**6.9 Adjustments required on the death of a partner**

When a partner dies, there is dissolution or reconstitution of partnership. The following adjustments are made on the death of a partner:

- (1) Distribution of accumulated profits, reserves and losses
- (2) Revaluation of assets and liabilities
- (3) Determination of new profit sharing ratio and gaining ratio
- (4) Adjustment for goodwill
- (5) Adjustment for current year's profit or loss upto the date of death
- (6) Settlement of the amount due to the deceased partner

The adjustments to be done in the accounts incase of death of a partner is the same as in the case of retirement of a partner except settlement of the amount due to the deceased partner.



Incase of retirement, the amount due from the firm is paid to the partner himself. But, when a partner dies the amount due from the firm is paid to the executor or legal representative of the deceased partner. The following journal entries are passed for settlement of the amount due to the deceased partner:

(i) **To transfer the amount due to the deceased partner to the executor or legal representative of the deceased partner.**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Deceased partner's capital A/c To Deceased partner's executor A/c	Dr.	xxx	xxx

(ii) **For payment made**

(a) **When the amount due is paid in cash immediately**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Deceased partner's executor A/c To Cash / Bank A/c	Dr.	xxx	xxx

(b) **When the amount due is not paid immediately in cash**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Deceased partner's executor A/c To Deceased partner's executor loan A/c	Dr.	xxx	xxx

(c) **When the amount due is partly paid in cash immediately**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Deceased partner's executor A/c To Cash / Bank A/c (amount paid) To Deceased partner's executor loan A/c	Dr.	xxx	xxx xxx

### Illustration: 20

Rathna, Baskar and Ibrahim are partners sharing profits and losses in the ratio of 2:3:4 respectively. Rathna died on 31<sup>st</sup> December, 2018. Final amount due to her showed a credit balance of ₹ 1,00,000. Pass journal entries if,

- The amount due is paid off immediately by cheque.
- The amount due is not paid immediately.
- ₹ 60,000 is paid immediately by cheque.

## Solution

### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	(a) Rathna's Executor A/c To Bank A/c (Amount due paid immediately)	Dr.	1,00,000	1,00,000
	(b) Rathna's Executor A/c To Rathna's Executor loan A/c (Amount due transferred to loan account)	Dr.	1,00,000	1,00,000
	(c) Rathna's Executor A/c To Bank A/c To Rathna's Executor loan A/c (₹ 60,000 paid and the balance transferred to loan account)	Dr.	1,00,000	60,000 40,000



Life policies may be taken on the life of the partners in a partnership firm. The life policy may be individual policy or joint life policy. In case of individual policy, if a partner dies, his policy alone matures and the policy amount is received from the insurance company.

In case of joint life policy, one policy is taken on the lives of all partners. When any one of the partners dies, the policy matures and the policy amount is received. In both types of policies, the insurance premium is paid by the partnership firm. The policy amount received from the insurance company is used to settle the amount due to the deceased partner.

### Illustration: 21

Sundar, Vivek and Pandian are partners, sharing profits in the ratio of 3:2:1. Their balance sheet as on 31<sup>st</sup> December, 2018 is as under:

#### Balance Sheet as on 31<sup>st</sup> December, 2018

Liabilities	₹	₹	Assets	₹
Capital accounts:			Land	80,000
Sundar	50,000		Stock	20,000
Vivek	40,000		Debtors	30,000
Pandian	10,000	1,00,000	Cash at bank	14,000
General reserve		36,000	Profit and loss A/c (loss)	6,000
Sundry creditors		14,000		
		1,50,000		1,50,000

On 1.1.2019, Pandian died and on his death the following arrangements are made:

- (i) Stock to be depreciated by 10%
- (ii) Land is to be appreciated by ₹ 11,000
- (iii) Reduce the value of debtors by ₹ 3,000
- (iv) The final amount due to Pandian was not paid

Prepare revaluation account, partners' capital account and the balance sheet of the firm after death.

### Solution

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Stock A/c		2,000	By Land A/c	11,000	
To Debtors A/c		3,000			
To Profit on revaluation transferred to					
Sundar's capital A/c (3/6)	3,000				
Vivek's capital A/c (2/6)	2,000				
Pandian's capital A/c (1/6)	1,000	<b>6,000</b>			
		11,000		11,000	

Dr.		Capital Account			Cr.		
Particulars	Sundar ₹	Vivek ₹	Pandian ₹	Particulars	Sundar ₹	Vivek ₹	Pandian ₹
To Profit and loss A/c	3,000	2,000	1,000	By Balance b/d	50,000	40,000	10,000
To Pandian's Executor A/c			16,000	By General reserve	18,000	12,000	6,000
To Balance c/d	<b>68,000</b>	<b>52,000</b>		By Revaluation A/c (profit)	3,000	2,000	1,000
	71,000	54,000	17,000		71,000	54,000	17,000
				By Balance b/d	68,000	52,000	

### Balance Sheet as on 1<sup>st</sup> January, 2019

Liabilities	₹	₹	Assets	₹	₹
Capital account:			Land	80,000	
Sundar	68,000		Add: Appreciation	11,000	91,000
Vivek	52,000	1,20,000	Stock	20,000	
Pandian's Executor A/c		16,000	Less: Decrease	2,000	18,000
Sundry creditors		14,000	Debtors	30,000	
			Less: Decrease	3,000	27,000
			Cash at bank		14,000
		1,50,000			1,50,000

### Illustration 22

Ramesh, Ravi and Akash are partners who share profits and losses in their capital ratio. Their balance sheet as on 31.12.2017 is as follows:

### Balance Sheet as on 31<sup>st</sup> December, 2017

Liabilities	₹	₹	Assets	₹	₹
Capital account:			Plant and machinery		45,000
Ramesh	30,000		Stock		22,000
Ravi	30,000		Debtors		15,000
Akash	20,000	80,000	Cash at bank		10,000
General reserve		8,000	Cash in hand		4,000
Creditors		8,000			
		96,000			96,000

Akash died on 31.3.2018. On the death of Akash, the following adjustments are made:

- (i) Plant and machinery is to be valued at ₹ 54,000
- (ii) Stock is to be depreciated by ₹ 1,000
- (iii) Goodwill of the firm is valued at ₹ 24,000
- (iv) Share of profit of Akash is to be calculated from the closing of the last financial year to the date of death on the basis of the average of the three completed years' profit before death. Profit for 2015, 2016 and 2017 were ₹ 66,000, ₹ 60,000 and ₹ 66,000 respectively.

Prepare the necessary ledger accounts and the balance sheet immediately after the death of Akash.

### Solution

Dr.		Revaluation Account		Cr.	
Particulars	₹	₹	Particulars	₹	
To Stock A/c		1,000	By Plant and Machinery A/c	9,000	
To Profit on revaluation transferred to					
Ramesh's capital A/c (3/8)	3,000				
Ravi's capital A/c (3/8)	3,000				
Akash's capital A/c (2/8)	2,000	<b>8,000</b>			
		9,000			9,000

Dr.		Capital Account			Cr.		
Particulars	Ramesh ₹	Ravi ₹	Akash ₹	Particulars	Ramesh ₹	Ravi ₹	Akash ₹
To Akash's capital A/c	3,000	3,000		By Balance b/d	30,000	30,000	20,000
To Akash's Executor A/c			<b>34,000</b>	By General reserve	3,000	3,000	2,000
To Balance c/d	<b>33,000</b>	<b>33,000</b>		By Revaluation A/c (profit)	3,000	3,000	2,000
				By Profit and loss suspense A/c			4,000
				By Ramesh's capital A/c			3,000
				By Ravi's capital A/c			3,000
	36,000	36,000	34,000		36,000	36,000	34,000
				By Balance b/d	33,000	33,000	

### Balance Sheet as on 31<sup>st</sup> December, 2018

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Plant and machinery	45,000	
Ramesh	33,000		Add: Appreciation	9,000	54,000
Ravi	33,000	66,000	Stock	22,000	
Akash's Executor's A/c		34,000	Less: Depreciation	1,000	21,000
Sundry creditors		8,000	Debtors		15,000
			Cash at bank		10,000
			Cash in hand		4,000
			Profit and loss suspense A/c		4,000
		<b>1,08,000</b>			<b>1,08,000</b>

## Working notes:

### (i) Profit sharing ratio

Profit sharing ratio = Capital ratio = 30,000: 30,000: 20,000 that is, 3:3:2

Gaining ratio between Ramesh and Ravi = Old profit sharing ratio = 3:3 that is 1:1

### (ii) Calculation of Akash's share of current year's profit

$$\text{Average profit} = \frac{66,000 + 60,000 + 66,000}{3} = \frac{1,92,000}{3} = ₹ 64,000$$

Current year's profit upto the date of death =  $64,000 \times 3/12 = ₹ 16,000$

Akash's share of current year's profit =  $16,000 \times 2/8 = ₹ 4,000$

### (iii) Akash's share of goodwill = $24,000 \times 2/8 = ₹ 6,000$

It is to be borne by Ramesh and Ravi in the gaining ratio of 1:1

### Points to remember

- ❖ On retirement of a partner, existing agreement comes to an end. The firm is reconstituted and other partners continue the partnership firm with a new agreement.
- ❖ The retiring partner is liable for all the acts which are carried out by the firm until the date of his retirement from the firm.
- ❖ At the time of retirement of a partner the accumulated profits and losses and reserves upto the date of retirement is to be distributed to all the partners in the old profit sharing ratio.
- ❖ When a partner retires from the partnership firm, the assets and liabilities are to be revalued and the profit or loss on revaluation is to be distributed to all the partners in the old profit sharing ratio.
- ❖ At the time of retirement of a partner, the continuing partners gain part of retiring partner's share of profit. Hence the retiring partner's share of goodwill is to be valued and adjusted through the capital accounts of the gaining partners.
- ❖ Gaining ratio is the proportion of the profit which is gained by the continuing partners. The share gained is new share minus old share.
- ❖ The amount due to the retiring partner may be settled by paying the entire amount due immediately in cash, or transfer the entire amount due to the loan account of the partner or by paying part of the amount immediately in cash and transferring the balance to the loan account of the partner.
- ❖ when a partner dies the amount due from the firm is paid to the executor or legal representative of the deceased partner.

## Self-examination questions

### I Multiple choice questions

#### Choose the correct answer



1. A partner retires from the partnership firm on 30<sup>th</sup> June. He is liable for all the acts of the firm up to the
  - (a) End of the current accounting period
  - (b) End of the previous accounting period
  - (c) Date of his retirement
  - (d) Date of his final settlement
2. On retirement of a partner from a partnership firm, accumulated profits and losses are distributed to the partners in the
  - (a) New profit sharing ratio
  - (b) Old profit sharing ratio
  - (c) Gaining ratio
  - (d) Sacrificing ratio
3. On retirement of a partner, general reserve is transferred to the
  - (a) Capital account of all the partners
  - (b) Revaluation account
  - (c) Capital account of the continuing partners
  - (d) Memorandum revaluation account
4. On revaluation, the increase in liabilities leads to
  - (a) Gain
  - (b) Loss
  - (c) Profit
  - (d) None of these
5. At the time of retirement of a partner, determination of gaining ratio is required
  - (a) To transfer revaluation profit or loss
  - (b) To distribute accumulated profits and losses
  - (c) To adjust goodwill
  - (d) None of these
6. If the final amount due to a retiring partner is not paid immediately, it is transferred to
  - (a) Bank A/c
  - (b) Retiring partner's capital A/c
  - (c) Retiring partner's loan A/c
  - (d) Other partners' capital A/c
7. 'A' was a partner in a partnership firm. He died on 31<sup>st</sup> March 2019. The final amount due to him is ₹ 25,000 which is not paid immediately. It will be transferred to
  - (a) A's capital account
  - (b) A's current account
  - (c) A's Executor account
  - (d) A's Executor loan account

8. A, B and C are partners sharing profits in the ratio of 2:2:1. On retirement of B, goodwill of the firm was valued as ₹ 30,000. Find the contribution of A and C to compensate B:
- (a) ₹ 20,000 and ₹ 10,000                      (b) ₹ 8,000 and ₹ 4,000  
(c) ₹ 10,000 and ₹ 20,000                      (d) ₹ 15,000 and ₹ 15,000
9. A, B and C are partners sharing profits in the ratio of 4:2:3. C retires. The new profit sharing ratio between A and B will be
- (a) 4:3                      (b) 3:4                      (c) 2:1                      (d) 1:2
10. X, Y and Z were partners sharing profits and losses equally. X died on 1<sup>st</sup> April 2019. Find out the share of X in the profit of 2019 based on the profit of 2018 which showed ₹ 36,000.
- (a) ₹ 1,000                      (b) ₹ 3,000                      (c) ₹ 12,000                      (d) ₹ 36,000

### Answers

1 (c)	2(b)	3(a)	4(b)	5 (c)	6(c)	7(d)	8(b)	9(c)	10(b)
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## II. Very short answer questions

1. What is meant by retirement of a partner?
2. What is gaining ratio?
3. What is the purpose of calculating gaining ratio?
4. What is the journal entry to be passed to transfer the amount due to the deceased partner to the executor of the deceased partner?

## III Short answer questions

1. List out the adjustments made at the time of retirement of a partner in a partnership firm.
2. Distinguish between sacrificing ratio and gaining ratio.
3. What are the ways in which the final amount due to an outgoing partner can be settled?

## IV Exercises

### Retirement of a partner

#### Distribution of accumulated profits, reserves and losses

1. Dheena, Surya and Janaki are partners sharing profits and losses in the ratio of 5:3:2. On 31.3.2018, Dheena retired. On the date of retirement, the books of the firm showed a reserve fund of ₹ 50,000. Pass journal entry to transfer the reserve fund.

(Answer: Reserve fund: Dheena: ₹ 25,000(Cr.); Surya: ₹ 15,000 (Cr.);  
Janaki: ₹ 10,000 (Cr.))

2. Rosi, Rathi and Rani are partners of a firm sharing profits and losses equally. Rathi retired from the partnership on 1.1.2018. On that date, their balance sheet showed accumulated loss of ₹ 45,000 on the asset side of the balance sheet. Give the journal entry to distribute the accumulated loss.

(Answer: Rosi: ₹ 15,000(Dr.); Rathi: ₹15,000 (Dr.); Rani: ₹ 15,000 (Dr.))



3. Akash, Mugesh and Sanjay are partners in a firm sharing profits and losses in the ratio of 3:2:1. Their balance sheet as on 31<sup>st</sup> March, 2017 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Buildings	1,10,000
Akash	40,000		Vehicle	30,000
Mugesh	60,000		Stock in trade	26,000
Sanjay	30,000	1,30,000	Debtors	25,000
Profit and loss appropriation A/c		12,000	Cash in hand	15,000
General reserve		24,000		
Workmen compensation fund		18,000		
Bills payable		22,000		
		2,06,000		2,06,000

Pass journal entry to transfer accumulated Profit and prepare the capital account of the partners  
**(Answer: Akash's capital: ₹ 67,000 (Cr.); Mugesh's capital: ₹ 78,000 (Cr.); Sanjay's capital: ₹ 39,000 (Cr.))**

#### Revaluation of assets and liabilities

4. Roja, Neela and Kanaga are partners sharing profits and losses in the ratio of 4:3:3. On 1<sup>st</sup> April 2017, Roja retires and on retirement, the following adjustments are agreed upon.

- Increase the value of building by ₹ 30,000.
- Depreciate stock by ₹ 5,000 and furniture by ₹ 12,000.
- Provide an outstanding liability of ₹ 1,000

Pass journal entries and prepare revaluation account.

**(Answer: Revaluation profit: ₹ 12,000)**

5. Vinoth, Karthi and Pranav are partners sharing profits and losses in the ratio of 2:2:1. Pranav retires from partnership on 1<sup>st</sup> April 2018. The following adjustments are to be made.

- Increase the value of land and building by ₹ 18,000
- Reduce the value of machinery by ₹ 15,000
- A provision would also be made for outstanding expenses for ₹ 8,000.

Give journal entries and prepare revaluation account.

**(Answer: Revaluation loss: ₹ 5,000)**

6. Chandru, Vishal and Ramanan are partners in a firm sharing profits and losses equally. Their balance sheet as on 31<sup>st</sup> March, 2018 is as follows:

Liabilities		₹	Assets		₹
Capital accounts:			Furniture		60,000
Chandru	60,000		Machinery		1,20,000
Vishal	70,000		Sundry debtors	33,000	
Ramanan	70,000	2,00,000	Less: Provision for		
Bills payable		80,000	doubtful debts	3,000	30,000
			Bills receivable		50,000
			Cash at bank		20,000
		2,80,000			2,80,000

Ramanan retired on 31<sup>st</sup> March 2019 subject to the following conditions:

- Machinery is valued at ₹ 1,50,000
- Value of furniture brought down by ₹ 10,000
- Provision for doubtful debts should be increased to ₹ 5,000
- Investment of ₹ 30,000 not recorded in the books is to be recorded now.

Pass necessary journal entries and prepare revaluation account.

(Answer: Revaluation profit: ₹ 48, 000)

### New profit sharing ratio and gaining ratio

7. Kayal, Mala and Neela are partners sharing profits in the ratio of 2:2:1. Kayal retires and the new profit sharing ratio between Mala and Neela is 3:2. Calculate the gaining ratio.

(Answer: Gaining ratio: 1:1)

8. Sunil, Sumathi and Sundari are partners sharing profits in the ratio of 3:3:4. Sundari retires and her share is taken up entirely by Sunil. Calculate the new profit sharing ratio and gaining ratio.

(Answer: Gaining ratio: 4:0; New ratio: 7:3)

9. Ramu, Somu, Gopu are partners sharing profits in the ratio of 3:5:7. Gopu retires and the share is purchased by Ramu and Somu in the ratio of 3:1. Find the new profit sharing ratio and gaining ratio.

(Answer: Gaining ratio: 3:1; New ratio: 11:9)

10. Navin, Ravi and Kumar are partners sharing profits in the ratio of  $\frac{1}{2}$ ,  $\frac{1}{4}$  and  $\frac{1}{4}$  respectively. Kumar retires and his share is taken up by Navin and Ravi equally. Calculate the new profit sharing ratio and gaining ratio.

(Answer: New ratio 5:3; Gaining ratio 1:1)

11. Mani, Gani and Soni are partners sharing the profits and losses in the ratio of 4:5:6. Mani retires from the firm. Calculate the new profit sharing ratio and gaining ratio.

(Answer: New profit sharing ratio and gaining ratio is 5:6)

### Adjustment for goodwill

12. Rajan, Suman and Jegan were partners in a firm sharing profits and losses in the ratio of 4:3:2. Suman retired from partnership. The goodwill of the firm on the date of retirement was valued at ₹ 45,000. Pass necessary journal entries for goodwill on the assumption that the fluctuating capital method is followed.

(Answer: Suman's share of goodwill: ₹ 15,000;  
Rajan's capital: ₹ 10,000 (Dr.); Jegan's capital: ₹ 5,000 (Dr.))

13. Balu, Chandru and Nirmal are partners in a firm sharing profits and losses in the ratio of 5:3:2. On 31<sup>st</sup> March 2018, Nirmal retires from the firm. On the date of Nirmal's retirement, goodwill appeared in the books of the firm at ₹ 60,000. By assuming fluctuating capital account, pass the necessary journal entry if the partners decide to
- write off the entire amount of existing goodwill
  - write off half of the existing goodwill.

(Answer: (a) Balu's capital: ₹ 30,000 (Dr.); Chandru's capital: ₹18,000 (Dr.);  
Nirmal's capital: ₹ 12,000 (Dr.) (b) Balu's capital: ₹ 15,000 (Dr.);  
Chandru's capital: ₹9,000 (Dr.); Nirmal's capital: ₹6,000 (Dr.))

### Adjustment for current year's profit or loss upto the date of retirement

14. Rani, Jaya and Rathi are partners sharing profits and losses in the ratio of 2:2:1. On 31.3.2018, Rathi retired from the partnership. Profit of the preceding years is as follows: 2014: 10,000; 2015: ₹ 20,000; 2016: ₹ 18,000 and 2017: ₹ 32,000

Find out the share of profit of Rathi for the year 2018 till the date of retirement if

- Profit is to be distributed on the basis of the previous year's profit
- Profit is to be distributed on the basis of the average profit of the past 4 years

Also pass necessary journal entries by assuming partners capitals are fluctuating.

(Answer: (a) Rathi's share of profit: ₹ 1,600); (b) Rathi's share of profit: ₹ 1,000)

### Settlement of amount due to the retiring partner

15. Kavin, Madhan and Ranjith are partners sharing profits and losses in the ratio of 4:3:3 respectively. Kavin retires from the firm on 31st December, 2018. On the date of retirement, his capital account shows a credit balance of ₹ 1,50,000. Pass journal entries if:
- The amount due is paid off immediately.
  - The amount due is not paid immediately.
  - ₹ 1,00,000 is paid and the balance in future.

(Answer: (a) Kavin's loan: Nil; (b) Kavin's loan: ₹ 1,50,000; (c) Kavin's loan: ₹ 50,000)

16. Manju, Charu and Lavanya are partners in a firm sharing profits and losses in the ratio of 5:3:2. Their balance sheet as on 31<sup>st</sup> March, 2018 is as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Buildings	1,00,000
Manju	70,000		Furniture	80,000
Charu	70,000		Stock	60,000
Lavanya	70,000	2,10,000	Debtors	40,000
Sundry creditors		40,000	Cash in hand	20,000
Profit and loss A/c		50,000		
		3,00,000		3,00,000

Manju retired from the partnership firm on 31.03.2018 subject to the following adjustments:

- Stock to be depreciated by ₹ 10,000
- Provision for doubtful debts to be created for ₹ 3,000.
- Buildings to be appreciated by ₹ 28,000

Prepare revaluation account and capital accounts of partners after retirement.

(Answer: Revaluation profit: ₹15, 000; Manju's loan account: ₹1,02,500(Cr.), Capital account: Charu: ₹89,500(Cr.); Lavanya: ₹ 83,000(Cr.))

### Comprehensive problems

17. Kannan, Rahim and John are partners in a firm sharing profit and losses in the ratio of 5:3:2. The balance sheet as on 31<sup>st</sup> December, 2017 was as follows:

Liabilities	₹	₹	Assets	₹
Capital accounts:			Buildings	90,000
Kannan	1,00,000		Machinery	60,000
Rahim	80,000		Debtors	30,000
John	40,000	2,20,000	Stock	20,000
Workmen compensation fund		30,000	Cash at bank	50,000
Creditors		20,000	Profit and loss A/c (loss)	20,000
		2,70,000		2,70,000

John retires on 1<sup>st</sup> January 2018, subject to following conditions:

- To appreciate building by 10%
- Stock to be depreciated by 5%.
- To provide ₹1,000 for bad debts
- An unrecorded liability of ₹8,000 have been noticed.
- The retiring partner shall be paid immediately.

Prepare revaluation account, partners' capital account and the balance sheet of the firm after retirement.

(Answer: Revaluation loss: ₹ 1,000; Capital account: Kannan: ₹ 1,04,500, Rahim: ₹ 82,700, Amount paid to John ₹41,800; Balance sheet total: ₹ 2,15,200)

18. Saran, Arun and Karan are partners in a firm sharing profits and losses in the ratio of 4:3:3. Their balance sheet as on 31.12.2016 was as follows:

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Buildings		60,000
Saran	60,000		Machinery		40,000
Arun	50,000		Investment		20,000
Karan	40,000	1,50,000	Stock		12,000
General reserve		15,000	Debtors	25,000	
Creditors		35,000	Less: Provision		
			Provision for		
			bad debts	1000	24,000
			Cash at bank		44,000
		2,00,000			2,00,000

Karan retires on 1.1.2017 subject to the following conditions:

- Goodwill of the firm is valued at ₹ 21,000
- Machinery to be appreciated by 10%
- Building to be valued at ₹ 80,000
- Provision for bad debts to be raised to ₹ 2,000
- Stock to be depreciated by ₹ 2,000
- Final amount due to Karan is not paid immediately

Prepare the necessary ledger accounts and show the balance sheet of the firm after retirement.

(Answer: Revaluation profit: ₹ 21,000; Capital A/c: Saran: ₹ 70,800; Arun: ₹ 58,100; Karan's loan account: ₹ 57,100; Balance sheet total: ₹ 2,21,000)

19. Rajesh, Sathish and Mathan are partners sharing profits and losses in the ratio of 3:2:1 respectively. Their balance sheet as on 31.3.2017 is given below.

Liabilities	₹	₹	Assets	₹	₹
Capital accounts:			Premises		4,00,000
Rajesh	4,00,000		Machinery		4,20,000
Sathish	3,00,000		Debtors		1,60,000
Mathan	2,50,000	9,50,000	Stock		3,00,000
General reserve		1,20,000	Cash at bank		20,000
Creditors		50,000			
Bills payable		1,80,000			
		13,00,000			13,00,000

Mathan retires on 31<sup>st</sup> March, 2017 subject to the following conditions:

- (i) Rajsh and Sathish will share profits and losses in the ratio of 3:2
- (ii) Assets are to be revalued as follows:  
Machinery ₹ 3,90,000, Stock ₹ 2,90,000, Debtors ₹ 1,52,000.
- (iii) Goodwill of the firm is valued at ₹ 1,20,000

Prepare necessary ledger accounts and the balance sheet immediately after the retirement of Mathan.

**(Answer: Revaluation loss: ₹ 48,000; Mathan loan: A/c ₹ 2,82,000;  
Rajesh's capital A/c: ₹ 4,24,000; Sathish capital A/c: ₹ 3,16,000;  
Balance sheet total: ₹ 12,52,000)**

### Death of a partner

20. Janani, Janaki and Jamuna are partners sharing profits and losses in the ratio of 3:3:1 respectively. Janaki died on 31<sup>st</sup> December, 2017. Final amount due to her showed a credit balance of ₹ 1,40,000. Pass journal entries if,

- (a) The amount due is paid off immediately.
- (b) The amount due is not paid immediately.
- (c) ₹ 75, 000 is paid and the balance in future.

21. Varsha, Shanthi and Madhuri are partners, sharing profits in the ratio of 5:4:3. Their balance sheet as on 31<sup>st</sup> December 2017 is as under:

**Balance Sheet as on 31<sup>st</sup> December 2017**

Liabilities	₹	₹	Assets	₹
Capital accounts:			Premises	1,20,000
Varsha	80,000		Stock	40,000
Shanthi	60,000		Debtors	50,000
Madhuri	20,000	1,60,000	Cash at bank	18,000
General reserve		48,000	Profit and loss A/c (loss)	12,000
Sundry creditors		32,000		
		2,40,000		2,40,000

On 1.1.2018, Madhuri died and on her death the following arrangements are made:

- (i) Stock to be depreciated by ₹ 5,000
- (ii) Premises is to be appreciated by 20%

- (iii) To provide ₹4,000 for bad debts  
 (iv) The final amount due to Madhuri was not paid

Prepare revaluation account, partners' capital account and the balance sheet of the firm after death.

(Answer: Revaluation profit: ₹ 15,000;  
 Varsha's capital A/c: ₹ 1,01,250; Santhi's capital account: ₹ 77,000;  
 Madhuri's executors account: ₹ 32,750; Balance sheet total: ₹ 2,43,000)

22. Vijayan, Sudhan and Suman are partners who share profits and losses in their capital ratio. Their balance sheet as on 31.12.2018 is as follows:

**Balance Sheet as on 31.12.2018**

Liabilities	₹	₹	Assets	₹
Capital accounts:			Building	80,000
Vijayan	70,000		Stock	45,000
Sudhan	50,000		Debtors	25,000
Suman	30,000	1,50,000	Cash at bank	20,000
General reserve		18,000	Cash in hand	15,000
Creditors		17,000		
		1,85,000		1,85,000

Suman died on 31.3.2019. On the death of Suman, the following adjustments are made:

- (i) Building is to be valued at ₹ 1,00,000  
 (ii) Stock to be depreciated by ₹ 5,000  
 (iii) Goodwill of the firm is valued at ₹ 36,000  
 (iv) Share of profit from the closing of the last financial year to the date of death on the basis of the average of the three completed years' profit before death.

Profit for 2016, 2017 and 2018 were ₹ 40,000, ₹ 50,000 and ₹ 30,000 respectively.

Prepare the necessary ledger accounts and the balance sheet immediately after the death of Suman.

(Answer: Revaluation profit ₹ 15,000; Vijayan's capital A/c: ₹ 81,200;  
 Sudhan's capital account: ₹ 58,000; Suman's executor's account: ₹ 45,800;  
 Balance sheet total: ₹ 2,02,000)

  
**CASE STUDY**

Arun, Balu and Charan are partners in a partnership firm. After few years, Charan wanted to leave the firm because of his illness. The other two partners agreed on this. After making adjustments for reserves and revaluation of assets and liabilities, Charan's capital account showed a balance of ₹ 1,40,000. But, Arun and Balu paid ₹ 1,65,000 to Charan. After his retirement, one of the firm's customers filed a case against the firm, for the bad service provided by the firm.

**Discuss on the following:**

1. Apart from illness, what other reasons can be there for retirement?
2. What are the adjustments to be made in the accounts when Charan leaves the firm?
3. What could have been the cause for paying ₹ 1,65,000, instead of ₹ 1,40,000, to Charan?
4. If the firm did not have enough money to settle the amount due to Charan, what can be done?
5. Is Charan liable for the case filed by the customer?

**To explore further**

After a partner's death, if the remaining partners agreed to close down the partnership firm, what should be done?

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# UNIT 7

## COMPANY ACCOUNTS



### Contents

- 7.1 Introduction
- 7.2 Meaning and definition of a company
- 7.3 Characteristics of a company
- 7.4 Meaning and types of shares
- 7.5 Divisions of share capital
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- 7.7 Process of issue of equity shares
- 7.8 Issue of shares for cash in instalments
- 7.9 Issue of shares for cash in lumpsum
- 7.10 Issue of shares for consideration other than cash



### Points to recall

The following points are to be recalled before learning company accounts:

- ◇ Joint stock company
- ◇ Double entry system



### Learning objectives

To enable the students to

- ◇ Understand the statutory provisions regarding issue, forfeiture and reissue of shares.
- ◇ Understand the accounting treatment for issue, forfeiture and reissue of shares.

### Key terms to know

- ◇ Preference shares
- ◇ Equity shares
- ◇ Over subscription
- ◇ Pro rata allotment
- ◇ Calls in advance
- ◇ Calls in arrear



## equity 7.1 Introduction



### Student activity 7.1

Read the following. What do you find in common? What do they mean to you?

Tamil Nadu Newsprint and Papers Limited (TNPL)

Bharath Heavy Electricals Limited (BHEL)

Infosys Limited

Indial Oil Corporation Limited

Human needs and wants are ever growing. In order to meet them production must be carried on, on a large scale. For this, large amount of capital, modern technology and managerial skills are needed for business units. Sole proprietorship and partnership firms may not be able to raise large amount of capital to equip themselves with these. To overcome this limitation, the concept of 'Company form of organisation' came into existence. The capital of companies is divided into small units called shares. Capital needed by the company could be raised by inviting the general public to buy shares and invest in the business. These investors are called shareholders or members of the company. The money raised by issuing shares is called share capital. Profits are distributed among the shareholders in the form of dividends.

It is not practical for all the members to take part in the management of the company. So, they appoint, at the annual general meeting, board of directors who take part in the management of the business. The liability of the shareholders is limited to the face value of shares. A limited company differs from other forms of business units. It has a separate legal entity.

## 7.2 Meaning and definition of a company

Company is a voluntary association of persons which has separate legal entity. It has perpetual succession and the liability of the members is limited.

According to Lord Justice Lindley, "A company is an association of many persons who contribute money or money's worth to a common stock and employ it in some trade or business and who share the profit and loss arising there from. The common stock so contributed is denoted in money and is the capital of the company. The persons who contributed in it or form it, or to whom it belongs, are members. The proportion of capital to which each member is entitled is his share".

## 7.3 Characteristics of a company

Following are the characteristics of a company:

- (a) **Voluntary association:** A company is a voluntary association of persons. No law can compel persons to form a company.

- (b) **Separate legal entity:** Company is an artificial person. It has a separate legal entity which is separate and distinct from its members.
- (c) **Common seal:** A company may have a common seal which can be affixed on the documents.
- (d) **Perpetual succession:** A company continues for ever. Its continuity is not affected by the changes in its members. It can be wound up only by law.
- (e) **Limited liability:** The liability of the shareholders of the company is limited to the extent of face value of the shares held by them.
- (f) **Transferability of shares:** The shares of a company are freely transferable except in case of a private company.

## 7.4 Meaning and types of shares

The capital of a company is divided into small units of fixed amount. These units are called shares. The shares which can be issued by a company are of two types (i) preference shares and (ii) equity shares.

### (i) Preference shares

Preference shares are the shares which have the following two preferential rights over the equity shares:

- (a) Preference towards the payment of dividend at a fixed rate during the life time of the company and
- (b) Preference towards the repayment of capital on winding up of the company.

### (ii) Equity shares

Equity shares are those shares which are not preference shares. These shares do not enjoy any preferential rights. Rate of dividend is not fixed on equity shares and it depends upon the profits earned by the company. In case of winding up of a company equity shareholders are paid after the payments are made to preference shareholders. Equity shares are also known as ordinary shares.

## 7.5 Divisions of share capital

The share capital of a company is divided into the following categories:

### (i) Authorised capital

It means such capital as is authorised by the memorandum of association. It is the maximum amount which can be raised as capital. It is also known as registered capital or nominal capital.

### (ii) Issued capital

This represents that part of authorised capital which is offered for subscription.

### (iii) Subscribed capital

It refers to that part of issued capital which has been applied for and also allotted by the company.

#### (iv) Called up capital

It refers to that part of subscribed capital which has been called up by the company for payment.

#### (v) Paid up capital

It is that part of called up capital which has been actually paid by the shareholders.

#### (vi) Reserve capital

The company can reserve a part of its subscribed capital to be called up only at the time of winding up. It is called reserve capital.



#### Student activity 7.2

A company's annual report contains the following data. The face value of its shares is ₹ 10 each. Identify the company's registered capital, issued capital, subscribed capital and called up capital. Also find out the number of shares the company had issued.

- ₹ 5,00,000
- ₹ 2,00,000
- ₹ 3,00,000
- ₹ 3,50,000

### 7.6 Issue of equity shares

A public company may raise capital by issue of equity shares through the following ways:

- 1 Public issue
- 2 Private placement
- 3 Rights issue
- 4 Bonus issue

#### 1. Public issue

Issue of equity shares to the public through prospectus by a public company is called public issue. It includes initial public offer and further public offer.

#### 2. Private placement

Private placement means any offer of equity shares or invitation to subscribe equity shares to a select group of persons by a company (other than by way of public offer) through issue of a private placement offer letter and which satisfies the conditions specified in Section 42 of the Indian Companies Act, 2013.

#### 3. Rights issue

Issue of equity shares to the existing shareholders of the company through a letter of offer is known as rights issue.

#### 4. Bonus issue

Issue of equity shares to the existing shareholders of the company at free of cost out of accumulated profit is known as bonus issue.

## 7.7 Process of issue of equity shares

A company can issue shares as per the provisions of the Indian Companies Act and as per the guidelines issued by Securities and Exchange Board of India (SEBI).

- (i) **Inviting subscription:** A public company has to issue a prospectus and invite the general public to subscribe for its shares.
- (ii) **Receipt of application:** On the basis of the prospectus, applications are deposited in a scheduled bank by the applicants along with application money within the time specified. Application money must be at least 5 per cent of the nominal value of the shares.
- (iii) **Allotment of shares:** When the minimum subscription stated in the prospectus has been subscribed for by the public, a company can allot shares. For those to whom shares could not be allotted, their application money will be refunded. If the minimum subscription is not received, all the application money received has to be refunded to the applicants.



As per Section 39 of the Indian Companies Act, 2013, application money must be at least 5 per cent of the nominal value of shares or such other percentage or amount as may be specified by the Securities Exchange Board by making regulations. As per SEBI guidelines, the minimum application money shall not be less than 25 per cent of the issue price.

A company may issue equity shares either for cash or for consideration other than cash. When shares are issued for cash, the cash may be received (a) in instalments or (b) at one time (lumpsum).

## 7.8 Issue of shares for cash in instalments

The share capital may be received through instalments as below:

- First instalment called application money
- Second instalment called allotment money
- Third instalment called first call money
- The last instalment called final call money

After allotment, whenever the need arises call can be made. Call is a demand by a company to the shareholders holding partly paid up shares to pay further instalments towards the purchase price of shares. There may be more than one call. These calls can be differentiated by serial numbers such as first call, second call, third call and so on. The last instalment will be the final call. The words 'and final' will also be added to the last call. Example, if third call is the final call, it will be termed as 'third and final call'.



Calls are to be made as provided in the Articles of Association of a company. In the absence of the required provisions in the Articles, Table F, Schedule I of the Indian Companies Act, 2013 will be applicable which has the following provisions:

Period of one month must elapse between two calls.

The amount of one call should not be more than 25% of the face value of the share.

Equity shares may be issued for cash at par or at premium. When a company issues shares at a price equal to the face value (nominal value), it is known as issue at par. When a company issues shares at a price more than the face value, the shares are said to be issued at premium. The excess is called as premium.

**(i) When shares are issued for cash at par:**

Following are the journal entries to be passed:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	<b>1. On receipt of application money</b>			
	Bank A/c Dr.		xxx	
	To Equity share application A/c			xxx
	<b>2. On allotment of shares, to transfer share application money</b>			
	Share application A/c Dr.		xxx	
	To Equity share capital A/c			xxx
	<b>3. On refund of application money for rejected applications</b>			
	Equity share application A/c Dr.		xxx	
	To Bank A/c			xxx
	<b>4. For allotment money due</b>			
	Equity share allotment A/c Dr.		xxx	
	To Equity share capital A/c			xxx
	<b>5. On receipt of allotment money</b>			
	Bank A/c Dr.		xxx	
	To Equity share allotment A/c			xxx
	<b>6. On making call for the call money due</b>			
	Equity share call A/c Dr.		xxx	
	To Equity share capital A/c			xxx
	<b>7. On receipt of call money</b>			
	Bank A/c Dr.		xxx	
	To Equity share call A/c			xxx

**Illustration 1**

Thai Ltd. issued 1,00,000 equity shares of ₹ 10 each, payable ₹ 5 on application, ₹ 2 on allotment, ₹ 2 on first call and ₹ 1 on final call. All the shares are subscribed and amount was duly received. Pass journal entries.

## Solution

### In the books of Thai Ltd. Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c To Equity share application A/c (Application money received)	Dr.	5,00,000	5,00,000
	Equity share application A/c To Equity share capital A/c (Transfer of share application money to share capital)	Dr.	5,00,000	5,00,000
	Equity share allotment A/c To Equity share capital A/c (Share allotment money due)	Dr.	2,00,000	2,00,000
	Bank A/c To Equity share allotment A/c (Allotment money received)	Dr.	2,00,000	2,00,000
	Equity share first call A/c To Equity share capital A/c (Share first call money due)	Dr.	2,00,000	2,00,000
	Bank A/c To Equity share first call A/c (Share first call money received)	Dr.	2,00,000	2,00,000
	Equity share second and final call A/c To Equity share capital A/c (Share second and final call money due)	Dr.	1,00,000	1,00,000
	Bank A/c To Equity share second and final call A/c (Share second and final call money received)	Dr.	1,00,000	1,00,000

### 7.8.1 Under subscription

All the shares offered to the public may not be subscribed in full. When the number of shares subscribed is less than the number of shares offered, it is known as under subscription. Under such circumstance, all those who have duly applied will obtain allotment provided minimum subscription as mentioned in the prospectus has been subscribed.

## Illustration 2

Joy Company issued 10,000 equity shares at ₹ 10 per share payable ₹ 5 on application, ₹ 3 on allotment and ₹ 2 on first and final call. The public subscribed for 9,000 shares. The directors allotted all the 9,000 shares and duly received the money. Pass the necessary journal entries.

### Solution

#### In the books of Joy Company Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (9,000 × 5) Dr. To Equity share application A/c (Application money received)		45,000	45,000
	Equity share application A/c Dr. To Equity share capital A/c (Transfer of application money to share capital A/c)		45,000	45,000
	Equity share allotment A/c Dr. To Equity share capital A/c (Allotment money due)		27,000	27,000
	Bank A/c Dr. To Equity share allotment A/c (Allotment money received)		27,000	27,000
	Equity share first and final call A/c Dr. To Equity share capital A/c (Call money due)		18,000	18,000
	Bank A/c Dr. To Equity share first and final call A/c (Call money received)		18,000	18,000

### 7.8.2 Over subscription

When the number of shares applied for is more than the number of shares offered for subscription, it is said to be over subscription. This situation can be dealt with as per any of the following three alternatives:

- Some applications are accepted in full and others are totally rejected. Application money is returned to the applicants for rejected applications.
- All applications are allotted in proportion of shares applied for. This is called pro rata allotment. Excess application money may be returned or may be retained for adjustment towards allotment money and call money.
- A combination of the above two may be applied.



### Illustration 3

Bharath Ltd. issued 1,00,000 equity shares of ₹ 10 each to the public at par. The details of the amount payable on the shares are as follows:

On application	₹ 5 per share
On allotment	₹ 3 per share
On first and final call	₹ 2 per share

Application money was received for 1,20,000 shares. Excess application money was refunded immediately. Pass journal entries to record the above.

### Solution

#### In the books of Bharath Ltd.

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (1,20,000 × 5) Dr. To Equity share application A/c (Application money received)		6,00,000	6,00,000
	Equity share application A/c (1,00,000 × 5) Dr. To Equity share capital A/c (Transfer of share application money to share capital)		5,00,000	5,00,000
	Equity share application A/c (20,000 × 5) Dr. To Bank A/c (Excess share application money refunded)		1,00,000	1,00,000
	Equity share allotment A/c Dr. To Equity share capital A/c (Share allotment money due)		3,00,000	3,00,000
	Bank A/c Dr. To Equity share allotment A/c (Allotment money received)		3,00,000	3,00,000
	Equity share first and final call A/c Dr. To Equity share capital A/c (Share first and final call money due)		2,00,000	2,00,000
	Bank A/c Dr. To Equity share first and final call A/c (Share first and final call money received)		2,00,000	2,00,000

#### Illustration 4

Khan Ltd. issued 50,000 shares of ₹ 10 each to the public payable ₹ 4 on application, ₹ 4 on allotment and ₹ 2 on first and final call. Applications were received for 65,000 shares. The directors decided to allot 50,000 shares on pro rata basis and surplus application money was utilised for allotment. Pass journal entries assuming that the amounts due were received.

#### Solution

#### In the books of Khan Ltd.

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (65,000 × 4) Dr. To Equity share application A/c (Application money received)		2,60,000	2,60,000
	Equity share application A/c (50,000 × 4) Dr. To Equity share capital A/c (Transfer of share application money to share capital)		2,00,000	2,00,000
	Equity share application A/c (15,000 × 4) Dr. To Equity share allotment A/c (Excess share application money utilised for allotment)		60,000	60,000
	Equity share allotment A/c Dr. To Equity share capital A/c (Share allotment money due)		2,00,000	2,00,000
	Bank A/c (2,00,000 – 60,000) Dr. To Equity share allotment A/c (Allotment money received)		1,40,000	1,40,000
	Equity share first and final call A/c (50,000 × 2) Dr. To Equity share capital A/c (Share first and final call money due)		1,00,000	1,00,000
	Bank A/c Dr. To Equity share first and final call A/c (Share first and final call money received)		1,00,000	1,00,000

#### Illustration 5

Sudha Ltd. offered 1,00,000 shares of ₹ 10 each to the public payable ₹ 3 on application, ₹ 4 on share allotment and the balance when required. Applications for 1,40,000 shares were received on which the directors allotted as:

Applicants for 60,000 shares - Full

Applicants for 75,000 shares - 40,000 shares (excess money will be utilised for allotment)

Applicants for 5,000 shares - Nil

All the money due was received. Pass journal entries upto the receipt of allotment.

### Solution

#### In the books of Sudha Ltd.

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (1,40,000 × 3) To Equity share application A/c (Application money received)	Dr.	4,20,000	4,20,000
	Equity share application A/c (1,00,000 × 3) To Equity share capital A/c (Transfer of share application money to share capital)	Dr.	3,00,000	3,00,000
	Equity share application A/c (5,000 × 3) To Bank A/c (Excess application money refunded)	Dr.	15,000	15,000
	Equity share application A/c (35,000 × 3) To Equity share allotment A/c (Excess share application money utilised for allotment)	Dr.	1,05,000	1,05,000
	Equity share allotment A/c (1,00,000 × 4) To Equity share capital A/c (Share allotment money due)	Dr.	4,00,000	4,00,000
	Bank A/c To Equity share allotment A/c (Allotment money received)	Dr.	2,95,000	2,95,000

#### Working note:

Shares applied for	Shares Allotted	Application money received	Application money	Appropriation towards Allotment money	Refunded
60,000	60,000	1,80,000	1,80,000	-	-
75,000	40,000	2,25,000	1,20,000	1,05,000	
5,000	-	15,000	-	-	15,000

### 7.8.3 Calls in advance

The excess amount paid over the called up value of a share is known as calls in advance. It is the excess money paid on application or allotment or calls. Such excess amount can be returned or adjusted towards future payment. If the company decides to adjust such amount towards future payment, the excess amount may also be transferred to a separate account called calls in advance account.

Calls in advance does not form part of the company's share capital and no dividend is payable on such amount. In the balance sheet, it should be shown under current liabilities.

As per Section 50 of the Indian Companies Act, 2013, the company can accept calls in advance only if it is authorised by its Articles of Association. As per Table F of the Indian Companies Act, 2013, interest may be paid on calls in advance if Articles of Association so provide not exceeding 12% per annum.

#### Tutorial note

The excess application money on allotted shares after adjustment for allotment money should be transferred to calls in advance account.

Following are the journal entries to be passed:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	<b>(a) For money received in advance on allotment and call</b>			
	Bank A/c Dr.		xxx	
	To Call in advance A/c			xxx
	<b>(b) For adjusting towards call(s)</b>			
	Calls in advance A/c Dr.		xxx	
	To Share call A/c			xxx

#### Illustration 6

Aruna Mills Ltd. with a registered capital of ₹ 5,00,000 in equity shares of ₹ 10 each, issued 20,000 of such shares payable as follows; ₹ 4 per share on application, ₹ 4 per share on allotment and ₹ 2 per share on first and final call. The issue was duly subscribed.

All the money payable was duly received. But on allotment, one shareholder paid the entire balance on his holding of 300 shares.

Give journal entries to record the above.

**Solution****In the books of Aruna Mills Ltd.  
Journal entries**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (20,000 × 4) Dr. To Share application A/c (Application money received)		80,000	80,000
	Share application A/c Dr. To Share capital A/c (Application money transferred to share capital A/c)		80,000	80,000
	Share allotment A/c (20,000 × 4) Dr. To Share capital A/c (Allotment money due)		80,000	80,000
	Bank A/c (20,000 × 4) + (300 × 2) Dr. To Share allotment A/c To Calls in advance A/c (300 × 2) (Allotment money received)		80,600	80,000 600
	Share first and final call A/c (20,000 × 2) Dr. To Share capital A/c (First and final call money due)		40,000	40,000
	Bank A/c (19,700 × 2) Dr. Calls in advance A/c Dr. To Share first and final call A/c (First and final call money received and calls in advance adjusted)		39,400 600	40,000

### 7.8.4 Calls in arrear

When a shareholder fails to pay the amount due on allotment or on calls, the amount remaining unpaid is known as calls in arrears. In other words, the amount called up but not paid is calls in arrear.

As per Table F of the Indian Companies Act, 2013, interest may be charged on calls in arrear if Articles of Association so provide not exceeding 10% per annum.

There are two methods of accounting of calls in arrear.

#### (i) By not opening calls in arrear account

Under this method, amount unpaid by the shareholders remains in the respective call account until the amount is collected or the shares are forfeited.

#### (ii) By opening calls in arrear account

Under this method, amount unpaid by the shareholders is transferred by debiting it to a separate account called calls in arrear account. When calls in arrear is collected or when the share is forfeited, the calls in arrear account is credited.

### Illustration 7

Jeyam Tyres issued 15,000 ordinary shares of ₹ 10 each payable as follows:

₹ 3 on application; ₹ 5 on allotment; ₹ 2 on first and final call. All money were duly received except one shareholder holding 100 shares failed to pay the call money. Pass the necessary journal entries for call (using calls in arrear account).

### Solution

#### Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Equity share first and final call A/c (15,000 × 2) Dr. To Share capital A/c (Share first and final call money due)		30,000	30,000
	Bank A/c (14,900 × 2) Dr. Calls in arrear A/c (100 × 2) Dr. To Equity share first and final call A/c (Amount received on calls and amount not received transferred to calls in arrear account)		29,800 200	30,000

### 7.8.5 Forfeiture of shares

When a shareholder defaults in making payment of allotment and/or call money, the shares may be forfeited. On forfeiture, the share allotment is cancelled and to that extent, share capital is reduced. The person ceases to be a shareholder of the company after the shares are forfeited.

On forfeiture, the amount so far paid by the shareholder is forfeited which is a gain to the company and is credited to forfeited shares account. Forfeited shares account is shown under share capital as a separate head in the Note to Accounts to the balance sheet.

The following journal entry is to be passed in the books of the company:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Equity share capital A/c (called up amount) Dr.		xxx	
	To Equity share allotment A/c (amount unpaid)			xxx
	To Equity share call A/c (amount unpaid)			xxx
	To Forfeited shares A/c (amount so far paid)			xxx
	(Forfeiture of shares for non payment of allotment and call)			

### Illustration 8

Anitha was holding 500 equity shares of ₹ 10 each of Thanjavur Motors Ltd, issued at par. She paid ₹ 3 on application, ₹ 5 on allotment but could not pay the first and final call of ₹ 2. The directors forfeited the shares for nonpayment of call money. Give Journal entry for forfeiture of shares.

### Solution

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Equity share capital A/c (500 × 10) Dr.		5,000	
	To Equity share call A/c (500 × 2)			1,000
	To Forfeited shares A/c (500 × 8)			4,000
	(500 shares forfeited for non payment of call money)			

### Illustration 9

Muthu was holding 20 equity shares of ₹ 10 each on which he paid ₹ 2 on application but could not pay ₹ 3 on allotment and ₹ 1 on first call. Directors forfeited the shares after the first call. Give journal entry for recording the forfeiture of shares.

### Solution

#### Journal entry

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Equity share capital A/c (20 × 6) Dr.		120	
	To Equity share allotment A/c (20 × 3)			60
	To Equity share first call A/c (20 × 1)			20
	To Forfeited shares A/c (20 × 2)			40
	(Shares forfeited)			

### Tutorial note

Equity share capital is debited with the called up amount of ₹ 6.

### 7.8.6 Re-issue of forfeited shares

Shares forfeited can be reissued by the company. The shares can be reissued at any price. But, the reissue price cannot be less than the amount unpaid on forfeited shares.

Example: If a share of ₹ 10 on which ₹ 4 has already been paid as application money is forfeited and reissued as fully paid up, then a minimum of ₹ 6 must be fixed as the new price (10 – 4 = 6). When forfeited shares are reissued at a loss, such loss is to be debited to forfeited shares account. When forfeited shares are reissued at a premium, the amount of such premium will be credited to securities premium account. The following journal entries are passed on reissue:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	<b>(i) When reissue is made at par</b>			
	Bank A/c Dr.		xxx	
	To Equity share capital A/c			xxx
	<b>(ii) When reissue is made at premium</b>			
	Bank A/c Dr.		xxx	
	To Equity share capital A/c			xxx
	To Securities premium A/c			xxx
	<b>(iii) When reissue is made at loss</b>			
	Bank A/c Dr.		xxx	
	Forfeited shares A/c (loss on reissue) Dr.		xxx	
	To Equity share capital A/c			xxx

If the reissue price is more than the amount unpaid on forfeited shares, it results in profit on reissue which is treated as capital profit and is transferred to capital reserve account. The following journal entry is passed:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Forfeited shares A/c Dr.		xxx	
	To Capital reserve A/c			xxx

When only a part of the forfeited shares are reissued, the proportionate amount of profit on the shares reissued should be transferred to capital reserve account. Proportionate amount of profit is computed as follows:

$$\frac{\text{Total amount forfeited}}{\text{Total number of shares forfeited}} \times \text{Number of shares reissued}$$

The remaining amount in the forfeited shares account is shown under share capital as a separate head under share capital in the Note to Accounts to the balance sheet.



### Illustration 10

Anu Company forfeited 200 equity shares of ₹ 10 each issued at par held by Thiyagu for nonpayment of the final call of ₹ 3 per share. The shares were reissued to Laxman at ₹ 6 per share. Show the journal entries for forfeiture and reissue.

### Solution

#### In the books of Anu Company Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Equity share capital A/c (200 × 10) Dr. To Equity share final call A/c (200 × 3) To Forfeited shares A/c (200 × 7) (200 shares forfeited)		2,000	600 1,400
	Bank A/c (200 × 6) Dr. Forfeited shares A/c (200 × 4) Dr. To Share capital A/c (200 × 10) (Forfeited shares reissued)		1,200 800	2,000
	Forfeited shares A/c (1,400-800) Dr. To Capital reserve A/c (Gain on reissue of forfeited shares transferred to capital reserve account)		600	600

### Illustration 11

Maruthu Ltd. forfeited 150 equity shares of ₹ 10 each for non payment of final call of ₹ 4 per share. Of these 100 shares were reissued @ ₹ 9 per share. Pass journal entries for forfeiture and reissue.

### Solution

#### In the books of Maruthu Ltd. Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Equity share capital A/c (150 × 10) Dr. To Equity share final call A/c (150 × 4) To Forfeited shares A/c (150 × 6) (50 shares forfeited)		1,500	600 900
	Bank A/c (100 × 9) Dr. Forfeited shares A/c (100 × 1) Dr. To Equity share capital A/c (100 × 10) (100 forfeited shares reissued @ ₹ 9 per share)		900 100	1,000

Forfeited shares A/c	Dr.	500	
To Capital reserve A/c			500
(Gain on reissue of forfeited shares transferred to capital reserve account)			

### Working note:

Forfeited amount for 150 shares = ₹ 900

Forfeited amount for 100 shares =  $\frac{900}{150} \times 100 = ₹ 600$

Gain or loss = Amount forfeited – loss on reissue  
= 600 – 100

Net gain = ₹ 500

### Illustration 12

Gemini Ltd. forfeited 20 equity shares of ₹ 10 each, ₹ 7 called up, on which Mahesh had paid application and allotment money of ₹ 5 per share. Of these 15 shares were reissued to Naresh by receiving ₹ 6 per share paid up as ₹ 7 per share. Pass journal entries for forfeiture and reissue.

### Solution

#### In the books of Gemini Ltd. Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Equity share capital A/c (20 × 7) Dr.		140	
	To Equity share first call A/c (20 × 2)			40
	To Forfeited shares A/c (20 × 5)			100
	(Forfeiture of 20 shares, ₹ 7 called up)			
	Bank A/c (15 × 6) Dr.		90	
	Forfeited shares A/c Dr.		15	
	To Equity share capital A/c (15 × 7)			105
	(Reissue of 15 forfeited shares @ ₹ 6 per share)			
	Forfeited shares A/c Dr.		60	
	To Capital reserve A/c			60
	(Gain on reissue of forfeited shares transferred to capital reserve account)			

**Note:** Computation of transfer to capital reserve

Forfeited amount for reissued shares of 15 =  $\frac{100}{20} \times 15 = 75$

Less: Loss on reissue

Transfer to capital reserve

Remaining balance in shares forfeited account ₹ 25 will appear in the balance sheet.

### Illustration 13

Jenifer Ltd. issued 10,000 equity shares of ₹ 10 each at par payable on application ₹ 3 per share, on allotment ₹ 3 per share, on first call ₹ 2 per share and on second and final call ₹ 2 per share. The issue was fully subscribed and all the amounts were duly received with the exception of 100 shares held by Subbu, who failed to pay the second and final call. His shares were forfeited and reissued to Hema at ₹ 7 per share. Journalise the above transactions.

### Solution

#### In the books of Aruna Mills Ltd. Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (10,000 × 3) To Equity share application A/c (Application money received)	Dr.	30,000	30,000
	Equity share application A/c To Equity share capital A/c (Application money transferred to share capital A/c)	Dr.	30,000	30,000
	Equity share allotment A/c (10,000 × 3) To Equity share capital A/c (Allotment money due)	Dr.	30,000	30,000
	Bank A/c (10,000 × 3) To Equity share allotment A/c (Allotment money received)	Dr.	30,000	30,000
	Equity share first call A/c (10,000 × 2) To Equity share capital A/c (First call money due)	Dr.	20,000	20,000
	Bank A/c (10,000 × 2) To Equity share first call A/c (First call money received)	Dr.	20,000	20,000
	Equity share second and final call A/c (10,000 × 2) To Equity share capital A/c (Second and final call money due)	Dr.	20,000	20,000
	Bank A/c (9,900 × 2) To Equity share second and final call A/c (Second and final call money received)	Dr.	19,800	19,800

Equity share capital A/c (100 × 10) To Equity share second and final call A/c To Forfeited shares A/c (100 shares forfeited)	Dr.	1,000	200 800
Bank A/c (100 × 7) Forfeited shares A/c To Equity share capital A/c (100 × 10) (Shares forfeited reissued)	Dr. Dr.	700 300	1,000
Forfeited shares A/c (800-300) To Capital reserve A/c (Gain on reissue of forfeited shares transferred to capital reserve account)	Dr.	500	500

### Illustration 14

X company issued 10,000 equity shares of ₹ 10 each payable as under:

On application	₹ 2
On allotment	₹ 4
On first call	₹ 2
On second and final call	₹ 2

Applications were received for 30,000 shares. Applications for 10,000 shares were rejected and allotment was made proportionately towards remaining applications and the excess application money is adjusted towards allotment money. The directors made both the calls and the all the amount were received except the final call on 600 shares which were subsequently forfeited. Later 400 forfeited shares were reissued as fully paid by receiving ₹ 7 per share. Give journal entries.

### Solution

#### In the books of X company Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (30,000 × 2) To Equity share application A/c (Application money received on 30,000 shares @ ₹ 2 per share)	Dr.	60,000	60,000
	Equity share application A/c (10,000 × 2) To Equity share capital A/c (Share application transferred to share capital)	Dr.	20,000	20,000
	Equity share application A/c To Bank A/c (10,000 × 2) To Equity share allotment A/c (10,000 × 2) (Application money refunded for rejected applications and excess application money adjusted towards allotment)	Dr.	40,000	20,000 20,000

Equity share Allotment A/c (10,000 × 4) To Equity share capital A/c (Allotment money due)	Dr.	40,000	40,000
Bank A/c (40,000-20,000) To Equity share allotment A/c (Allotment money received)	Dr.	20,000	20,000
Equity share first call A/c (10,000 × 2) To Equity share capital A/c (First call money due)	Dr.	20,000	20,000
Bank A/c To Equity share first call A/c (First call money received)	Dr.	20,000	20,000
Equity share second and final call A/c (10,000 × 2) To Equity share capital A/c (Share second and final call due)	Dr.	20,000	20,000
Bank A/c (9,400 × 2) To Equity share second and final call A/c (Second and final call money received on 9,400 shares)	Dr.	18,800	18,800
Equity share capital A/c (600 × 10) To Equity share second and final call A/c (600 × 2) To Forfeited shares A/c (600 × 8) (Shares forfeited for nonpayment of final call money)	Dr.	6,000	1,200 4,800
Bank A/c (400 × 7) Forfeited shares A/c (400 × 3) To Equity share capital A/c (400 forfeited shares reissued at ₹ 7 per share)	Dr. Dr.	2,800 1,200	4,000
Forfeited shares A/c To Capital reserve A/c (Gain on reissue credited to capital reserve A/c)	Dr.	2,000	2,000

**Working note:**

Amount forfeited for 600 shares = ₹ 4,800

Amount forfeited for 400 shares =  $\frac{4,800}{600} \times 400$  ₹ 3,200

Less: Loss on reissue 1,200

Net gain transferred to capital reserve 2,000

### 7.8.7 Shares issued at premium

When a company issues shares at a price more than the face value (nominal value), the shares are said to be issued at premium. The excess is called as premium amount and is transferred to securities premium account. The amount of securities premium may be included in application money or allotment money or in a call. Securities premium account is shown under reserves and surplus as a separate head in the Note to Accounts to the balance sheet.

Following are the journal entries for recording securities premium:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	<b>(i) If premium is collected with application money</b>			
	<b>(a) For receiving application money</b> (application money + premium)			
	Bank A/c Dr.		xxx	
	To Equity share application A/c			xxx
	<b>(b) For transfer of application money</b>			
	Equity share application A/c Dr.		xxx	
	To Equity share capital A/c			xxx
	To Securities premium A/c			xxx
	<b>(ii) If premium is collected with allotment money/call money</b>			
	<b>(a) For allotment/ call money due</b> (allotment/call money + premium)			
	Equity share allotment/call A/c Dr.		xxx	
	To Equity share capital A/c			xxx
	To Securities premium A/c			xxx
	<b>(b) For receiving allotment/call money</b>			
	Bank A/c Dr.		xxx	
	To Equity share allotment/call A/c			xxx
	<b>(iii) When shares are forfeited (for which premium is not received)</b>			
	Equity share capital A/c Dr.		xxx	
	Securities premium A/c Dr.		xxx	
	To Equity share allotment A/c			xxx
	To Equity share call A/c			xxx
	To Forfeited shares A/c			xxx

**Tutorial note** While forfeiting shares for which premium had already been received, securities premium account should not be debited.

### Illustration 15

Shero Health Care Ltd. invited applications for 3,00,000 equity shares of ₹ 10 each at a premium of ₹ 2 per share payable as follows:

₹ 3 on application

₹ 5 (including premium) on allotment

₹ 4 on first and final call

There was over subscription and applications were received for 4,00,000 shares and the excess applications were rejected by the directors. All the money due were received. Pass the journal entries.

### Solution

**Note:** Number of shares rejected = 4,00,000 - 3,00,000 = 1,00,000

#### In the books of Shero Health Care Ltd Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (4,00,000 × 3) Dr. To Equity share application A/c (Application money on 4,00,000 shares @ ₹ 3 per share received)		12,00,000	12,00,000
	Equity share application A/c (3,00,000 × 3) Dr. To Equity share capital A/c (Share application transferred to share capital)		9,00,000	9,00,000
	Equity share application A/c (1,00,000 × 3) To Bank A/c (Money refunded for rejected applications)		3,00,000	3,00,000
	Equity share allotment A/c (3,00,000 × 5) Dr. To Equity share capital A/c (3,00,000 × 3) To Securities premium A/c (3,00,000 × 2) (Share allotment money ₹ 5 per share including ₹ 2 premium receivable for 3,00,000 shares)		15,00,000	9,00,000 6,00,000
	Bank A/c (3,00,000 × 5) Dr. To Equity share allotment A/c (Allotment money received)		15,00,000	15,00,000
	Equity share first and final call A/c Dr. To Equity share capital A/c (3,00,000 × 4) (Call money receivable)		12,00,000	12,00,000

Bank A/c	Dr.	12,00,000	
To Equity share first and final call A/c			12,00,000
(Call money received)			

### Illustration 16

Keerthiga Company issued equity shares of ₹ 10 each at 10% premium, payable ₹ 2 on application, ₹ 3 on allotment (including premium), ₹ 3 on first call and ₹ 3 on second and final call.

Journalise the transactions relating to forfeiture of shares for the following situations:

- Mohan who holds 50 shares failed to pay the second and final call and his shares were forfeited.
- Mohan who holds 50 shares failed to pay the allotment money, first call and second and final call money and his shares were forfeited.
- Mohan who holds 50 shares failed to pay the allotment money and first call and his shares were forfeited after the first call.

### Solution

#### In the books of Keerthiga Company Journal entries

##### (i) When final call money is not paid

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Equity share capital A/c (50 × 10) Dr.		500	
	To Equity share second and final call A/c (50 × 3)			150
	To Forfeited shares A/c (50 × 7)			350
	(50 shares forfeited)			

**Note:** Since the premium amount is received by the company, premium should not be cancelled.

##### (ii) When allotment, first call money and second and final call money is not paid

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Share capital A/c (50 × 10) Dr.		500	
	Securities premium A/c (50 × 1) Dr.		50	
	To Share allotment A/c (50 × 3)			150
	To Share first call A/c (50 × 3)			150
	To Share second and final call A/c (50 × 3)			150
	To Shares forfeited A/c (50 × 2)			100
	(50 shares forfeited)			



(iii) When allotment and first call money is not paid

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Share capital A/c (50 × 7) Dr.		350	
	Securities premium A/c (50 × 1) Dr.		50	
	To Share allotment A/c (50 × 3)			150
	To Share first call A/c (50 × 3)			150
	To Shares forfeited A/c (50 × 2) (50 shares forfeited)			100

**Illustration 17**

Divya Ltd. allotted 10,000 equity shares of ₹ 10 each at a premium of ₹ 2 per share to applicants of 14,000 shares on a pro rata basis. The excess application money will be adjusted towards allotment money. The amount payable was ₹ 2 on application, ₹ 5 on allotment (including premium of ₹ 2 each) and ₹ 3 on first call and ₹ 2 on final call. Vikas, a shareholder failed to pay the first call and final call on his 300 shares. All the shares were forfeited and out of them 200 shares were reissued @ ₹ 9 per share. Pass the necessary journal entries.

**Solution**

**In the books of Divya Ltd.**

**Journal entries**

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (14,000 × 2) Dr. To Equity share application A/c (Application money for 14,000 shares received)		28,000	28,000
	Equity share application A/c (10,000 × 2) Dr. To Equity share capital A/c (Application money transferred to share capital)		20,000	20,000
	Equity share application A/c (4,000 × 2) Dr. To Equity share allotment A/c (Excess application money adjusted towards allotment)		8,000	8,000
	Equity share allotment A/c (10,000 × 5) Dr. To Equity share capital A/c (10,000 × 3) To Securities premium A/c (10,000 × 2) (Allotment money due)		50,000	30,000 20,000
	Bank A/c (50,000 – 8,000) Dr. To Equity share allotment A/c (Allotment money received)		42,000	42,000

Equity share first call A/c (10,000 × 3) To Equity share capital A/c (First call amount due)	Dr.		30,000	30,000
Bank A/c (9,700 × 3) To Equity share first call A/c (First call money received for 9,700 shares)	Dr.		29,100	29,100
Equity share second and final call A/c (10,000 × 2) To Equity share capital A/c (Second and final call amount due)	Dr.		20,000	20,000
Bank A/c (9,700 × 2) To Equity share second and final call A/c (Second and final call money received for 9,700 shares)	Dr.		19,400	19,400
Equity share capital A/c (300 × 10) To Equity share first call A/c (300 × 3) To Equity share second and final call A/c (300 × 2) To Shares forfeited A/c (Forfeiture of 300 shares for non-payment first and second calls)	Dr.		3,000	900 600 1,500
Bank A/c (200 × 9) Shares forfeited A/c To Equity share capital A/c (Re-issue of 200 forfeited shares)	Dr. Dr.		1,800 200	2,000
Shares forfeited A/c To Capital reserve A/c (Profit on re-issue of 200 forfeited shares transferred to capital reserve account)	Dr.		800	800

**Working note:**

Amount forfeited for 300 shares = ₹ 1,500

Amount forfeited for 200 shares =  $\frac{1,500}{300} \times 200 = 1,000$

Less: Loss on reissue 200

Net gain transferred to capital reserve 800

**Illustration 18**

Thangam Ltd. issued 50,000 equity shares of ₹ 10 each at a premium of ₹ 2 per share payable as follows:

On application ₹ 5  
On allotment ₹ 5 (including premium)  
On first and final call ₹ 2

250

Issue was fully subscribed and the amounts due were received except Priya to whom 500 shares were allotted who failed to pay the allotment money and first and final call money. Her shares were forfeited. All the forfeited shares were reissued to Devi at ₹ 8 per share. Pass journal entries.

### Solution

#### In the books of Thangam Ltd. Journal entries

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (50,000 × 5) To Equity share application A/c (Application money received)	Dr.	2,50,000	2,50,000
	Equity share application A/c To Equity share capital A/c (Transfer of application money to share capital)	Dr.	2,50,000	2,50,000
	Equity share allotment A/c (50,000 × 5) To Equity share capital A/c (50,000 × 3) To Securities premium A/c (50,000 × 2) (Allotment money due)	Dr.	2,50,000	1,50,000 1,00,000
	Bank A/c (49,500 × 5) To Equity share allotment A/c (Allotment money received except on 500 shares)	Dr.	2,47,500	2,47,500
	Equity share first and final call A/c (50,000 × 2) To Equity share capital A/c (First and final call money due)	Dr.	1,00,000	1,00,000
	Bank A/c (49,500 × 2) To Equity share first and final call A/c (First and final call money received)	Dr.	99,000	99,000
	Equity share capital A/c (500 × 10) Securities Premium A/c (500 × 2) To Equity share allotment A/c (500 × 5) To Equity share first and final call A/c (500 × 2) To Forfeited shares A/c (500 × 5) (500 shares forfeited for nonpayment of allotment and first and final call money)	Dr. Dr.	5,000 1,000	2,500 1,000 2,500
	Bank A/c (500 × 8) Forfeited shares A/c (500 × 2) To Equity share capital A/c (500 × 10) (500 forfeited shares reissued)	Dr. Dr.	4,000 1,000	5,000

Forfeited shares A/c (2,500-1,000)	Dr.		1,500	
To Capital reserve A/c (Gain on reissue of forfeited shares transferred to capital reserve)				1,500

### 7.9 Issue of shares for cash in lumpsum

When shares issued either at par or at premium are payable in single payment, the shares are said to be issued against lumpsum payment.

The following journal entries are passed:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	(i) For receipt of application money Bank A/c	Dr.	xxx	
	To Equity share application A/c			xxx
	(ii) For transfer of application money Equity share application A/c	Dr.	xxx	
	To Equity share capital A/c To Securities premium A/c (if issued at premium)			xxx

### Illustration 19

Sara Company issues 10,000 equity shares of ₹ 10 each payable fully on application.

Pass journal entries if the shares are issued

- (i) at par
- (ii) at a premium of ₹ 2 per share.

#### Solution

#### In the books of Sara Company Journal entries

##### (i) Issued at par

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (10,000 x10)	Dr.	1,00,000	
	To Equity share application A/c (Application money received)			1,00,000
	Equity share application A/c	Dr.	1,00,000	
	To Equity share capital A/c (Application money transferred to share capital)			1,00,000

(ii) Issued at a premium

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Bank A/c (10,000 × 12) Dr. To Equity share application A/c (Application money received)		1,20,000	1,20,000
	Equity share application A/c Dr. To Equity share capital A/c (10,000 × 10) To Securities premium A/c (10,000 × 2) (Application money transferred to share capital)		1,20,000	1,00,000 20,000

### 7.10 Issue of shares for consideration other than cash

A company may issue shares for consideration other than cash when the company acquires fixed assets such as land and buildings, machinery, etc. Under such situation, the following journal entries are to be passed.

Date	Particulars	L.F.	Debit ₹	Credit ₹
	<b>(i) For purchase of asset</b> Respective asset A/c Dr. To Vendor A/c		xxx	xxx
	<b>(ii) For issue of shares</b> Vendor A/c Dr. To Equity share capital A/c To Securities premium A/c (if issued at premium)		xxx	xxx xxx

A company may also issue shares as consideration for the purchase of business, to promoters for their services and to brokers and underwriters for their commission.

### Illustration 20

Rajan Ltd. purchased machinery of ₹ 6,00,000 from Jagan Traders. It issued equity shares of ₹ 10 each fully paid in satisfaction of their claim. What entries will be made if such issue is made: (a) at par and (b) at a premium of 50%.

## Solution

### In the books of Rajan Ltd Journal entries

#### (a) When shares are issued at par:

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Machinery A/c To Jagan Traders A/c (Purchase of machinery)	Dr.	6,00,000	6,00,000
	Jagan Traders A/c To Equity share capital A/c (Issue of 60,000 shares of ₹ 10 each fully paid)	Dr.	6,00,000	6,00,000

#### (b) When shares are issued at a premium of 50%

Date	Particulars	L.F.	Debit ₹	Credit ₹
	Machinery A/c To Jagan Traders A/c (Purchase of machinery)	Dr.	6,00,000	6,00,000
	Jagan Traders A/c To Equity share capital A/c (40,000 × 10) To Securities premium A/c (40,000 × 5) (Issue of 40,000 shares of ₹ 10 each at a premium of 50%)	Dr.	6,00,000	4,00,000 2,00,000

#### Tutorial note

Computation of number of shares to be issued

Total amount = ₹ 6,00,000

Face value of the shares = ₹ 10

Premium = 50%; Therefore, premium amount =  $10 \times 50\% = ₹ 5$

Issue price = Face value + premium =  $10 + 5 = ₹ 15$

Number of equity shares to be issued =  $\frac{\text{Total amount}}{\text{Issue price}} = \frac{6,00,000}{15} = 40,000$  shares



#### Student activity 7.3

Collect the prospectus of three limited companies. Read them and identify the terms that you have learnt in this unit. Analyse the data and information given in them.



### Points to remember

- ❖ Authorised capital is the maximum amount that can be raised as capital as is authorised by the memorandum of association
- ❖ Reserve capital is part of subscribed capital to be called up at the time of winding up of the company.
- ❖ Issue of equity shares to public through prospectus by a public company is called public issue.
- ❖ When the share capital is received through instalments, first instalment is called application money.
- ❖ When the number of shares subscribed is less than the number of shares offered, it is known as under subscription.
- ❖ When the minimum subscription stated in the prospectus has been subscribed for by the public, a company can allot shares.
- ❖ When applications are allotted in proportion of shares applied for it is called pro-rata allotment.
- ❖ The excess amount paid over the called up value of a share is known as calls in advance.
- ❖ When a shareholder fails to pay the amount due on allotment or on calls, the amount remaining unpaid is known as calls in arrears.
- ❖ When a company issues shares at a price more than the face value (nominal value), the shares are said to be issued at premium.

### Self-examination questions



#### I Multiple choice questions

Choose the correct answer

1. A preference share is one
  - (i) which carries preferential right with respect to payment of dividend at fixed rate
  - (ii) which carries preferential right with respect to repayment of capital on winding up

(a) Only (i) is correct	(b) Only (ii) is correct
(c) Both (i) and (ii) are correct	(d) Both (i) and (ii) are incorrect
2. That part of share capital which can be called up only on the winding up of a company is called:

(a) Authorised capital	(b) Called up capital
(c) Capital reserve	(d) Reserve capital



3. At the time of forfeiture, share capital account is debited with
- (a) Face value (b) Nominal value  
(c) Paid up amount (d) Called up amount
4. After the forfeited shares are reissued, the balance in the forfeited shares account should be transferred to
- (a) General reserve account (b) Capital reserve account  
(c) Securities premium account (d) Surplus account
5. The amount received over and above the par value is credited to
- (a) Securities premium account (b) Calls in advance account  
(c) Share capital account (d) Forfeited shares account
6. Which of the following statement is false?
- (a) Issued capital can never be more than the authorised capital  
(b) In case of under subscription, issued capital will be less than the subscribed capital  
(c) Reserve capital can be called at the time of winding up  
(d) Paid up capital is part of called up capital
7. When shares are issued for purchase of assets, the amount should be credited to
- (a) Vendor's A/c (b) Sundry assets A/c  
(c) Share capital A/c (d) Bank A/c
8. Match the pair and identify the correct option
- |                        |   |   |
|------------------------|---|---|
| (1) Under subscription | - | (i) Amount prepaid for calls                |
| (2) Over subscription  | - | (ii) Subscription above the offered shares  |
| (3) Calls in arrear    | - | (iii) Subscription below the offered shares |
| (4) Calls in advance   | - | (iv) Amount unpaid on calls                 |
- |     |       |       |       |      |
|-----|-------|-------|-------|------|
|     | (1)   | (2)   | (3)   | (4)  |
| (a) | (i)   | (ii)  | (iii) | (iv) |
| (b) | (iv)  | (iii) | (ii)  | (i)  |
| (c) | (iii) | (ii)  | (iv)  | (i)  |
| (d) | (iii) | (iv)  | (i)   | (ii) |





9. If a share of ₹ 10 on which ₹ 8 has been paid up is forfeited. Minimum reissue price is  
(a) ₹ 10 per share (b) ₹ 8 per share  
(c) ₹ 5 per share (d) ₹ 2 per share
10. Supreme Ltd. forfeited 100 shares of ₹ 10 each for non-payment of final call of ₹ 2 per share. All these shares were re-issued at ₹ 9 per share. What amount will be transferred to capital reserve account?  
(a) ₹ 700 (b) ₹ 800  
(c) ₹ 900 (d) ₹ 1,000

### Answers

1 (c)	2(d)	3(d)	4(b)	5 (a)	6(b)	7(c)	8(c)	9(d)	10(a)
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### II Very short answer questions

1. What is a share?
2. What is over-subscription?
3. What is meant by calls in arrear?
4. Write a short note on securities premium account.
5. Why are the shares forfeited?

### III Short answer questions

1. State the differences between preference shares and equity shares.
2. Write a brief note on calls in advance.
3. What is reissue of forfeited shares?
4. Write a short note on (a) Authorised capital (b) Reserve capital
5. What is meant by issue of shares for consideration other than cash?

### IV Exercises

1. Progress Ltd. issued 50,000 ordinary shares of ₹ 10 each, payable ₹ 2 on application, ₹ 4 on allotment, ₹ 2 on first call and ₹ 2 on final call. All the shares are subscribed and amount was duly received. Pass journal entries.

### Under subscription

2. Sampath company issued 25,000 equity shares at ₹ 10 per share payable ₹ 3 on application, ₹ 4 on allotment, ₹ 3 on first and final call. The public subscribed for 24,000 shares. The directors allotted all the 24,000 shares and received the money duly. Pass necessary journal entries.





### Over subscription

3. Saranya Ltd. issued 20,000 equity shares of ₹ 10 each to the public at par. The details of the amount payable on the shares are as follows:

On application	₹ 3 per share
On allotment	₹ 4 per share
On first and final call	₹ 3 per share

Application money was received on 30,000 shares. Excess application money was refunded immediately. Pass journal entries to record the above.

4. Gaja Ltd issued 40,000 equity shares of ₹ 10 each to the public payable ₹ 2 on application, ₹ 5 on allotment and ₹ 3 on first and final call. Applications were received for 50,000 shares. The Directors decided to allot 40,000 shares on pro rata basis and surplus of application money was utilised for allotment. Pass journal entries assuming that the amounts due were received.

5. Lalitha Ltd. offered 30,000 equity shares of ₹ 10 each to the public payable ₹ 2 per share on application, ₹ 3 on share allotment and the balance when required. Applications for 50,000 shares were received on which the directors allotted as:

Applicants for 10,000 shares	- Full
Applicants for 35,000 shares	- 20,000 shares (excess money will be utilised for allotment)
Applicants for 5,000 shares	- Nil

All the money due was received. Pass journal entries upto the receipt of allotment.

### Calls in advance

6. Anjali Flour Ltd. with a registered capital of ₹ 4,00,000 in equity shares of ₹ 10 each, issued 30,000 of such shares; payable ₹ 2 per share on application, ₹ 5 per share on allotment and ₹ 3 share on first call. The issue was duly subscribed.

All the money payable was duly received but on allotment, one shareholder paid the entire balance on his holding of 500 shares. Give journal entries to record the transactions.

### Calls in arrear

7. Muthu Ltd. issued 50,000 equity shares of ₹ 10 each payable as follows;  
₹ 2 on application; ₹ 4 on allotment; ₹ 4 on first and final call.

All money were duly received except one shareholder holding 1,000 shares failed to pay the call money. Pass the necessary journal entries for calls by using calls in arrear account.

**(Answer: Calls in arrear: ₹ 4,000)**

### Forfeiture of Shares

8. Arjun was holding 1,000 equity shares of ₹ 10 each of Vanavil Electronics Ltd, issued at par. He paid ₹ 3 on application, ₹ 4 on allotment but could not pay the first and final call of



₹ 3. The directors forfeited the shares for nonpayment of call money. Give Journal entry for forfeiture of shares.

(Answer: Forfeited shares account: ₹ 7,000)

9. Lakshith was holding 50 shares of ₹ 10 each on which he paid ₹ 2 on application but could not pay ₹ 4 on allotment and ₹ 2 on first call. Directors forfeited the shares after the first call. Give journal entry for recording the forfeiture of shares.

(Answer: Forfeited shares account : ₹ 100)

### Reissue of shares

10. Goutham Ltd. forfeited 500 equity shares of ₹ 10 each issued at par held by Ragav for nonpayment of the final call of ₹ 2 per share. The shares were forfeited and reissued to Madhan at ₹ 8 per share. Show the journal entries for forfeiture and reissue.

(Answer: Capital reserve account : ₹ 3,000)

11. Nivetha Ltd. forfeited 1,000 equity shares of ₹ 10 each for non payment of call of ₹ 4 per share. Of these 800 shares were reissued @ ₹ 7 per share. Pass journal entries for forfeiture and reissue.

(Answer: Capital reserve account : ₹ 2,400)

12. Nathiya Textiles Ltd. forfeited 100 shares of ₹ 10 each, ₹ 8 called up, on which Mayuri had paid application and allotment money of ₹ 6 per share. Of these 75 shares were re-issued to Soundarya by receiving ₹ 7 per share paid up as ₹ 8 per share. Pass journal entries for forfeiture and reissue.

(Answer: Capital reserve account : ₹ 375)

13. Simon Ltd issued 50,000 equity shares of ₹ 10 each at par payable on application ₹ 1 per share, on allotment ₹ 5 per share, on first call ₹ 2 per share and on second and final call ₹ 2 per share. The issue was fully subscribed and all the amounts were duly received with the exception of 2,000 shares held by Chezhan, who failed to pay the second and final call. His shares were forfeited and reissued to Elango at ₹ 8 per share. Journalise the above transactions.

(Answer: Capital reserve account: ₹ 12,000)

14. Kanchana Ltd. issued 50,000 equity shares of ₹ 10 each payable as under.

On application	₹ 1
On allotment	₹ 5
On first call	₹ 2
On second and final call	₹ 2

Applications were received for 70,000 shares. Applications for 8,000 shares were rejected and allotment was made proportionately towards remaining applications. The directors made both the calls and the all the amount were received except the final call on 1,500 shares which were subsequently forfeited. Later 1,200 forfeited shares were reissued by receiving ₹ 8 per share. Give journal entries.

(Answer: Capital reserve account: ₹ 7,200)

### Shares issued at premium

15. Viswanath Furniture Ltd. invited applications for 20,000 equity shares of ₹ 10 each at a premium of ₹ 2 per share payable.

- ₹ 2 on application
- ₹ 5 (including premium) on allotment
- ₹ 5 on first and final call

There was over subscription and applications were received for 30,000 shares and the excess applications were rejected by the directors. All the money due were received. Pass the journal entries.

16. United Industries Ltd. issued equity shares of ₹ 10 each at 10% premium payable ₹ 3 on application, ₹ 4 on allotment (including premium), ₹ 2 on first call and ₹ 2 on second and final call.

Journalise the transactions relating to forfeiture of shares for the following situations:

- (i) Manoj who holds 250 shares failed to pay the second and final call and his shares were forfeited.
- (ii) Manoj who holds 250 shares failed to pay the allotment money and first call and second and final call and his shares were forfeited.
- (iii) Manoj who holds 250 shares failed to pay the allotment money and first call money and his shares were forfeited after the first call.

(Answer: Forfeited shares account: (i) ₹ 2,000; (ii) ₹ 750; (iii) ₹ 750)

17. Kasthuri Ltd. had allotted 20,000 equity shares of ₹ 10 each at a premium of ₹ 2 each to applicants of 30,000 shares on a pro rata basis. The amount payable was ₹ 3 on application, ₹ 5 on allotment (including premium of ₹ 2 each) and ₹ 2 on first call and ₹ 2 on final call. Subin, a shareholder failed to pay the first call and final call on his 500 shares. All the shares were forfeited and out of them 400 shares were reissued @ ₹ 8 per share. Pass necessary journal entries.

(Answer: Capital reserve account: ₹ 1,600)

18. Vairam Ltd. issued 60,000 equity shares of ₹ 10 each at a premium of ₹ 2 per share payable as follows:

- On application ₹ 6
- On allotment ₹ 4 (including premium)
- On first and final call ₹ 2

Issue was fully subscribed and the amounts due were received except Saritha to whom 1,000 shares were allotted who failed to pay the allotment money and first and final call money. Her shares were forfeited. All the forfeited shares were reissued to Parimala at ₹ 7 per share. Pass journal entries.

(Answer: Capital reserve account: ₹ 3,000)

### Issue of shares for cash in lumpsum

19. Abdul Ltd. issues 50,000 equity shares of ₹ 10 each payable fully on application. Pass journal entries if shares are issued (i) at par (ii) at a premium of ₹ 3 per share.

### Issue of shares for consideration other than cash

20. Paradise Ltd. purchased assets of ₹ 4,40,000 from Suguna Furniture Ltd. It issued equity shares of ₹ 10 each fully paid in satisfaction of their claim. What entries will be made if such issue is: (a) at par and (b) at premium of 10%.

(Answer: (a) Share capital account ₹ 4,40,000;

(b) Share capital account ₹ 4,00,000; Securities premium account ₹ 40,000)



### Student activity 7.4

Complete the following journal entries by filling the missing information.

Date	Particulars	L.F.	Dr. ₹	Cr. ₹
1.	_____ Dr.  To Share application A/c  ( Application money received @ 2 per share)		2,00,000	_____
2.	Share application A/c Dr.  To Share capital A/c  ( Share application money for _____ shares transferred to _____)		_____	2,00,000

  
**CASE STUDY**

Mala and Mary entered into a partnership business. The performance and profitability of the business were good. They wanted to expand their firm by investing more capital. But, they both had less personal savings, which was not sufficient to expand their business. So, they decided to convert their business into a limited company and registered it as M&M Ltd. The company is authorised to raise ₹ 10,00,000 divided into 1,00,000 units. To start with, M&M Ltd. bought some fixed assets such as land, furniture and fixtures from a vendor. But, M&M Ltd. did not pay cash or cheque for this.

The advertisement was given in the newspaper inviting public to buy shares of M&M Ltd. 50,000 shares were offered to the public for subscription. However, due to its profitability and popularity, M&M Ltd. received applications for 60,000 shares.

Now, discuss on the following:

1. State one reason, other than raising more capital, why may a partnership firm be converted into a limited company?
2. Apart from the issue of shares, what other sources are available for raising finance?
3. What is M&M Ltd.'s registered capital?
4. What is the value of each share?
5. Is there any other way M&M Ltd. could pay the vendor, other than credit terms, for buying the fixed assets?
6. Is M&M Ltd. allowed to issue more than 1,00,000 shares?
7. What is M&M Ltd.'s issued share capital?
8. How will the directors deal with over-subscription?

### To explore further

Before investing in any company, the shareholders or any potential investors may want to know the performance of the company. From where do they get such information?

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# UNIT 8

## FINANCIAL STATEMENT ANALYSIS



### Contents

- 8.1 Introduction
- 8.2 Financial statements
- 8.3 Financial statements of companies
- 8.4 Financial statement analysis
- 8.5 Tools of financial statement analysis
- 8.6 Preparation of comparative statements
- 8.7 Preparation of common size statements
- 8.8 Trend analysis



### Points to recall

The following points are to be recalled before learning financial statement analysis:

- ◇ Accounting principles
- ◇ Indian Accounting Standards
- ◇ Preparation of profit and loss account and balance sheet



### Learning objectives

- To enable the students to
- ◇ Understand the meaning and objectives of financial statement analysis
  - ◇ Understand the tools of financial statement analysis
  - ◇ Apply the tools to analyse the financial statements

### Key terms to know

- ◇ Financial statements
- ◇ Financial statement analysis
- ◇ Common size statement
- ◇ Comparative statement
- ◇ Trend analysis



## 8.1 Introduction

Business concerns prepare income statement and balance sheet at the end of an accounting period to ascertain the profitability and the financial position respectively. These statements give the totals of different expenditures, revenues and the net result, namely, profit or loss during the given period and balances of assets and liabilities and capital as on the last date of the accounting period. Thus, financial statements are sources of financial information. However, these statements do not give the relationship among the various items or the reasons for changes in the amounts of these items between two dates and the effect of such changes. For this purpose, different tools of financial statement analysis are used.

## 8.2. Financial statements

### 8.2.1 Meaning of financial statements

Financial statements are the statements prepared by the business concerns at the end of the accounting period to ascertain the operating results and the financial position. The basic financial statements prepared by business concerns are income statement and balance sheet. Income statement includes manufacturing account and trading and profit and loss account. It shows the net results of business activities during an accounting period. Balance sheet is a statement of assets and liabilities which shows the financial position as on a particular date.

Apart from these two basic statements, business concerns may also prepare cash flow statement, funds flow statement and statement of changes in financial position.

### 8.2.2 Features of financial statements

Following are the features of financial statements:

- (i) Financial statements are generally prepared at the end of an accounting period based on transactions recorded in the books of accounts.
- (ii) These statements are prepared for the organisation as a whole.
- (iii) Information is presented in a meaningful way by grouping items of similar nature such as fixed assets and current assets.
- (iv) Financial statements are prepared based on historical cost.
- (v) Financial statements are prepared based on accounting principles and Accounting Standards, which make financial statements comparable and realistic.
- (vi) Financial statements involve personal judgement in certain cases. For example, selection of method of depreciation, percentage of reserve, etc.

### 8.2.3 Significance of financial statements

Financial statements reveal the operating results and financial position of the business concern. The significance of financial statements to various stakeholders is as follows:

- (i) **To management:** Financial statements provide information to the management to take decision and to have control over business activities, in various areas.



- (ii) **To shareholders:** Financial statements help the shareholders to know whether the business has potential for growth and to decide to continue their shareholding.
- (iii) **To potential investors:** Financial statements help to value the securities and compare it with those of other business concerns before making their investment decisions.
- (iv) **To creditors:** Creditors can get information about the ability of the business to repay the debts from financial statements.
- (v) **To bankers:** Information given in the financial statements is significant to the bankers to assess whether there is adequate security to cover the amount of the loan or overdraft.
- (vi) **To government:** Financial statements are significant to government to assess the tax liability of business concerns and to frame and amend industrial polices.
- (vii) **To employees:** Through the financial statements, the employees can assess the ability of the business to pay salaries and whether they have future growth in the concern.

#### 8.2.4 Limitations of financial statements

Following are the limitations of financial statements:

- (i) **Lack of qualitative information:** Qualitative information that is non-monetary information is also important for business decisions. For example, efficiency of the employees, efficiency of the management, etc. But, this is ignored in financial statements.
- (ii) **Record of historical data:** Financial statements are prepared based on historical data. They may not reflect the current position.
- (iii) **Ignore price level changes:** Adjustments for price level changes are not made in the financial statements. Hence, financial statements may not reveal the current position.
- (iv) **Lack of consistency:** Different business concerns may use different accounting methods. Hence, comparison between two business concerns becomes difficult.
- (v) **Give only interim reports:** Financial statements are prepared at the end of every accounting period. But, the actual position of the business can be known only when the business is closed. Hence, financial statements may not reveal the exact position of the business concern.
- (vi) **Limited access to external users:** The external users do not have detailed and frequent information of financial results as they have limited access.
- (vii) **Influenced by personal judgement:** Preparation of financial statements may be influenced by personal judgements and therefore these are not free from bias.

#### 8.3 Financial statements of companies

Following provisions of the Indian Companies Act, 2013 have to be followed while preparing the financial statements of a company:

- (i) As per Section 2 (40), financial statements include balance sheet, profit and loss account / income and expenditure account, cash flow statement, statement of changes in equity and any explanatory note annexed to the above.
- (ii) Section 129 (1) of the Indian Companies Act, 2013 states that the financial statements shall give a true and fair view of the state of affairs of the company and shall comply with the Accounting Standards notified under section 133.

- (iii) Section 129 (1) also states that the financial statements shall be prepared in the form provided in schedule III of Indian Companies Act, 2013.



Where the financial statements of a company do not comply with the Accounting Standards referred to in Section 129 (1) of the Companies Act, 2013, the company shall disclose in its financial statements, the deviation from the Accounting Standards, the reasons for such deviation and the financial effects, if any, arising out of such deviation.



### Student activity 8.1

Invite an auditor to your class to discuss about the preparation of financial statements of different forms of business.

**Note:** Statement of profit and loss (Part II of Schedule III) and Balance Sheet (Part I of Schedule III) have been given only for understanding purpose and not for examination.

## Schedule III of the Companies Act, 2013

### PART II – STATEMENT OF PROFIT AND LOSS

Name of the Company .....

Profit and loss statement for the year ended .....

(Rupees in .....)

Particulars		Note No.	Figures for the current reporting period	Figures for the previous reporting period
1		2	3	4
I	Revenue from operations		xxx	xxx
II	Other income		xxx	xxx
III	Total Revenue ( I+II)		xxx	xxx
IV	Expenses:			
	Cost of materials consumed		xxx	xxx
	Purchase of Stock-in-Trade		xxx	xxx
	Changes in inventories of finished goods		xxx	xxx
	Work-in-progress and Stock-in-trade		xxx	xxx
	Employee benefits expenses		xxx	xxx
	Finance costs		xxx	xxx
	Depreciation and amortisation expenses		xxx	xxx
	Other expenses		xxx	xxx
	Total expenses		xxx	xxx

V	Profit before exceptional and extraordinary items and tax ( III-IV)	XXX	XXX
VI	Exceptional items	XXX	XXX
VII	Profit before extraordinary items and tax ( V-VI)	XXX	XXX
VIII	Extraordinary items	XXX	XXX
IX	Profit before tax ( VII-VIII)	XXX	XXX
X	Tax expense:		
	(1) Current tax	XXX	XXX
	(2) Deferred tax	XXX	XXX
XI	Profit (Loss) for the period from continuing operations ( VII-VIII)	XXX	XXX
XII	Profit ( Loss) from discontinuing operations	XXX	XXX
XIII	Tax expense of discontinuing operations	XXX	XXX
XIV	Profit (Loss) from discontinuing operations (after tax) ( XII-XIII)	XXX	XXX
XV	Profit (Loss) for the period (XI+XIV)	XXX	XXX
XVI	Earnings per equity share:		
	(1) Basic	XXX	XXX
	(2) Diluted	XXX	XXX

### PART I – BALANCE SHEET

Name of the Company.....

Balance Sheet as at.....

(Rupees in.....)

Particulars	Note No.	Figures as at the end of current reporting period	Figures as at the end of previous reporting period
1	2	3	4
<b>I. EQUITY AND LIABILITIES</b>			
<b>1. Shareholders' funds</b>			
a) Share capital			
b) Reserves and Surplus			
c) Money received against share warrants			
<b>2. Share application money pending allotment</b>			
<b>3. Non-current liabilities</b>			
a) Long-term borrowings			
b) Deferred tax liabilities (Net)			
c) Other long term liabilities			
d) Long-term provisions			
<b>4. Current liabilities</b>			
a) Short-term borrowings			
b) Trade payables			
c) Other current liabilities			
d) Short-term provisions			
<b>Total</b>			

<p><b>II. ASSETS</b></p> <p><b>1. Non-current assets</b></p> <p>a) Fixed assets</p> <p>    i) Tangible assets</p> <p>    ii) Intangible assets</p> <p>    iii) Capital Work-in-progress</p> <p>    iv) Intangible assets under development</p> <p>b) Non-current investments</p> <p>c) Deferred tax assets ( Net)</p> <p>d) Long-term loans and advances</p> <p>e) Other non-current assets</p> <p><b>2. Current assets</b></p> <p>a) Current investments</p> <p>b) Inventories</p> <p>c) Trade receivables</p> <p>d) Cash and cash equivalents</p> <p>e) Short-term loans and advances</p> <p>f) Other current assets</p> <p style="text-align: right;"><b>Total</b></p>			
---	--	--	--



As per Schedule III of the Companies Act, 2013, depending upon the turnover of the company, the figures appearing in the financial statements may be rounded off as given below:

Turnover	Rounding off
(a) less than one hundred crore rupees	To the nearest hundreds, thousands, lakhs or millions, or decimals thereof.
(b) one hundred crore rupees or more	To the nearest lakhs, millions or crores, or decimals thereof.

Once a unit of measurement is used, it shall be used uniformly in the financial statements.

## 8.4 Financial statement analysis

### 8.4.1 Meaning of financial statement analysis

Financial statement analysis is comparison of the various items in the financial statements by establishing and evaluating relationships among them so that, it gives a better understanding of the performance and financial status of the business concern.

It involves rearrangement of data in accordance with the purpose of analysis, application of financial tools, evaluating the relationship among the component parts and drawing conclusion based on the analysis. Thus, financial statement analysis includes both analysis and interpretation.

Analysis refers to examination of the figures computed and comparison of the same to establish relationship among them and identifying the reasons for the performance or changes. Interpretation refers to elucidation and explanation of the results of analysis.

### 8.4.2 Objectives of financial statement analysis

Financial statement analysis may be done with any of the following objectives:

1. To analyse the profitability and earning capacity
2. To study the long term and short term solvency of the business
3. To determine the efficiency in operations and use of assets
4. To determine the efficiency of the management and employees
5. To determine the trend in sales, production, etc.
6. To forecast for future and prepare budgets
7. To make inter-firm and intra-firm comparisons.



Intra-firm comparison is comparison within the organisation among different departments, divisions, etc.

Inter-firm comparison is comparison of one firm with other firm or firms in the industry.

### 8.4.3 Limitations of financial statement analysis

Following are the limitations of financial statement analysis:

1. All the limitations of financial statements such as ignoring non-monetary information, ignoring price level changes, etc., are applicable to financial statement analysis also.
2. Financial statement analysis is only the means and not an end, that is, it is only a tool in the hands of management and other shareholders. Interpretation of the results has to be done only by the financial analysts with due regard to the internal and external environmental factors.
3. Expert knowledge is required in analysing the financial statements.
4. Interpretation of the analysed data involves personal judgement as different experts may give different views.

## 8.5 Tools of financial statement analysis

Different tools are used for analysing the financial statements. The tool is selected based on the purpose of analysis. Following are the commonly used tools of financial statement analysis:

### (i) Comparative statement

A statement giving comparison of net increase or decrease in the individual items of financial statements of two or more years of a business concern is called comparative statement. It shows the actual figures at different periods of time, the increase or decrease in these figures

in absolute terms and the percentages of such increase or decrease. The two basic comparative statements prepared are comparative income statement and comparative balance sheet.

### **(ii) Common-size statements**

The common-size statements show the relationship of various items with some common base, expressed as percentage of the common base. The common bases are total of assets or total of equity and liabilities or revenue from operations (net sales). The common size statements include common-size income statement and common-size balance sheet.

In the common-size income statement, revenue from operations is taken as 100 and various expenses and incomes are expressed as a percentage to the revenue from operations. In the common-size balance sheet, the total of balance sheet, that is, the total of assets or total of equity and liabilities is taken as 100 and various assets and liabilities are expressed as a percentage of the total of assets or total of equity and liabilities.

The common-size statements can be compared with those of previous years. They can also be compared with those of other similar businesses with similar accounting policies.

### **(iii) Trend analysis**

Trend refers to the tendency of movement. Trend analysis refers to the study of movement of figures over a period. The trend may be increasing trend or decreasing trend or irregular. When data for more than two years are to be analysed, it may be difficult to use comparative statement. For this purpose, trend analysis may be used. One year, generally, the first year is taken as the base year. The figures of the base year are taken as 100. The figures for the other years are expressed as a percentage to the base year and the trend is determined.

### **(iv) Funds flow analysis**

The term 'fund' refers to working capital. Working capital refers to the excess of current assets over current liabilities. The term 'flow' means movement and includes both 'inflow' and 'outflow'. Funds flow analysis is concerned with preparation of funds flow statement which shows the inflow (sources) and outflow (applications) of funds in a given period of time. Funds flow analysis is useful in judging the credit worthiness, financial planning and preparation of budgets.

### **(v) Cash flow analysis**

Cash flow analysis is concerned with preparation of cash flow statement which shows the inflow and outflow of cash and cash equivalents in a given period of time. Cash includes cash in hand and demand deposits with banks. Cash equivalents denote short term investments which can be realised easily within a short period of time, without much loss in value. Cash flow analysis helps in assessing the liquidity and solvency of a business concern.

## **8.6 Preparation of comparative statements**

A comparative statement has five columns. Following are the steps to be followed in preparation of the comparative statement:

- (i) Column 1: In this column, particulars of items of income statement or balance sheet are written.
- (ii) Column 2: Enter absolute amount of year 1.
- (iii) Column 3: Enter absolute amount of year 2.
- (iv) Column 4: Show the difference in amounts between year 1 and year 2. If there is an increase in year 2, put plus sign and if there is decrease put minus sign.
- (v) Column 5: Show percentage increase or decrease of the difference amount shown in column 4 by dividing the amount shown in column 4 (absolute amount of increase or decrease) by column 2 (year 1 amount). That is,

$$\text{Percentage increase or decrease} = \frac{\text{Absolute amount of increase or decrease}}{\text{Year 1 amount}} \times 100$$

### Format of comparative statement

Particulars	Year 1	Year 2	Absolute amount of increase (+) or decrease (-)	Percentage increase (+) or decrease (-)
	₹	₹	₹	
(1)	(2)	(3)	(4)	(5)



### Horizontal analysis

When figures relating to several years are considered for the purpose of analysis, the analysis is called horizontal analysis. Generally, one year is taken as the base year and the figures relating to the other years are compared with that of the base year. Comparative statements and trend percentages are examples of horizontal analysis.

### Vertical analysis

When figures relating to one accounting year alone are considered for the purpose of analysis, the analysis is called vertical analysis. Here, relationship is established among items from various financial statements relating to the same accounting period. Preparation of common size statements and computation of ratios are examples of vertical analysis.

### Illustration 1

From the following particulars, prepare comparative income statement of Tharun Co. Ltd.

Particulars	2016-17	2017-18
	₹	₹
Revenue from operations	2,00,000	2,50,000
Other income	50,000	40,000
Expenses	1,50,000	1,20,000

## Solution

### Comparative income statement of Tharun Co. Ltd for the years ended 31<sup>st</sup> March, 2017 and 31<sup>st</sup> March, 2018

Particulars	2016-17	2017-18	Absolute amount of increase (+) or decrease (-)	Percentage increase (+) or decrease (-)
	₹	₹		
Revenue from operations	2,00,000	2,50,000	+50,000	+25
Add: Other income	50,000	40,000	-10,000	-20
Total revenue	2,50,000	2,90,000	+40,000	+16
Less: Expenses	1,50,000	1,20,000	-30,000	-20
Profit before tax	1,00,000	1,70,000	+70,000	+70

**Tutorial note:** Computation of percentage increase for revenue from operations

$$\frac{\text{Absolute amount of increase or decrease}}{\text{Year 1 amount}} \times 100 = \frac{50,000}{2,00,000} \times 100 = 25\%$$



### Student activity 8.2

While comparing the current year's income statement with that of the previous year, it is found that profit before tax has increased by 70%. Think of any three possible reasons for this increase.

## Illustration 2

From the following particulars, prepare comparative income statement of Abdul Co. Ltd.

Particulars	2015-16	2016-17
	₹	₹
Revenue from operations	3,00,000	3,60,000
Other income	1,00,000	60,000
Expenses	2,00,000	1,80,000
Income tax	30%	30%

## Solution

### Comparative income statement of Abdul Co. Ltd for the years ended 31<sup>st</sup> March, 2016 and 31<sup>st</sup> March, 2017

Particulars	2015-16	2016-17	Absolute amount of increase (+) or decrease (-)	Percentage increase (+) or decrease (-)
	₹	₹		
Revenue from operations	3,00,000	3,60,000	+60,000	+20
Add: Other income	1,00,000	60,000	-40,000	-40
Total revenue	4,00,000	4,20,000	+20,000	+5
Less: Expenses	2,00,000	1,80,000	-20,000	-10
Profit before tax	2,00,000	2,40,000	+40,000	+20
Less: Tax (30%)	60,000	72,000	+12,000	+20
Profit after tax	1,40,000	1,68,000	+28,000	+20



### Illustration 3

From the following particulars, prepare comparative income statement of Mary Co. Ltd.

Particulars	2015-16	2016-17
	₹	₹
Revenue from operations	4,00,000	5,00,000
Operating expenses	2,00,000	1,80,000
Income tax (% of the profit before tax)	20	50

### Solution

#### Comparative income statement of Mary Co. Ltd for the years ended 31<sup>st</sup> March, 2016 and 31<sup>st</sup> March, 2017

Particulars	2015-16	2016-17	Absolute amount of increase (+) or decrease (-)	Percentage increase (+) or decrease (-)
	₹	₹		
Revenue from operations	4,00,000	5,00,000	+1,00,000	+25
Less: Operating expenses	2,00,000	1,80,000	-20,000	-10
Profit before tax	2,00,000	3,20,000	+1,20,000	+60
Less: Income tax*	40,000	1,60,000	+1,20,000	+300
Profit after tax	1,60,000	1,60,000	-	-

#### \* Note: Calculation of income tax:

For 2015-16:  $2,00,000 \times 20\% = ₹ 40,000$

For 2016-17:  $3,20,000 \times 50\% = ₹ 1,60,000$

### Illustration 4

From the following balance sheet of Chandra Ltd, prepare comparative balance sheet as on 31<sup>st</sup> March 2016 and 31<sup>st</sup> March 2017.

Particulars	31 <sup>st</sup> March 2016	31 <sup>st</sup> March 2017
	₹	₹
<b>I EQUITY AND LIABILITIES</b>		
Shareholders' fund	1,00,000	2,60,000
Non-current liabilities	50,000	60,000
Current liabilities	25,000	30,000
Total	1,75,000	3,50,000
<b>II ASSETS</b>		
Non-current assets	1,00,000	2,00,000
Current assets	75,000	1,50,000
Total	1,75,000	3,50,000

## Solution

### Comparative balance sheet of Chandra Ltd as on 31<sup>st</sup> March 2016 and 31<sup>st</sup> March 2017

Particulars	2015-16	2016-17	Absolute amount of increase (+) or decrease (-)	Percentage increase (+) or decrease (-)
	₹	₹		
<b>I EQUITY AND LIABILITIES</b>				
Shareholders' fund	1,00,000	2,60,000	+1,60,000	+160
Non-current liabilities	50,000	60,000	+10,000	+20
Current liabilities	25,000	30,000	+5,000	+20
Total	1,75,000	3,50,000	+1,75,000	+100
<b>II ASSETS</b>				
Non-current assets	1,00,000	2,00,000	+1,00,000	+100
Current assets	75,000	1,50,000	+75,000	+100
Total	1,75,000	3,50,000	+1,75,000	+100

## Illustration 5

From the following particulars, prepare comparative balance sheet of Malar Ltd as on 31<sup>st</sup> March 2016 and 31<sup>st</sup> March 2017.

Particulars	31 <sup>st</sup> March 2016	31 <sup>st</sup> March 2017
	₹	₹
<b>I EQUITY AND LIABILITIES</b>		
1. Shareholders' fund		
a) Share capital	2,00,000	2,50,000
b) Reserves and surplus	50,000	50,000
2. Non-current liabilities		
Long-term borrowings	30,000	60,000
3. Current liabilities		
Trade payables	20,000	60,000
Total	3,00,000	4,20,000
<b>II ASSETS</b>		
1. Non-current assets		
a) Fixed assets	1,00,000	1,50,000
b) Non-current investments	50,000	75,000
2. Current assets		
Inventories	75,000	1,50,000
Cash and cash equivalents	75,000	45,000
Total	3,00,000	4,20,000

## Solution

### Comparative balance sheet of Malar Ltd as on 31<sup>st</sup> March 2016, and 31<sup>st</sup> March 2017

Particulars	2015-16	2016-17	Absolute amount of increase (+) or decrease (-)	Percentage increase (+) or decrease (-)
	₹	₹	₹	
<b>I EQUITY AND LIABILITIES</b>				
1. Shareholders' Fund				
a) Share capital	2,00,000	2,50,000	+50,000	+25
b) Reserves and surplus	50,000	50,000	-	-
2. Non-current liabilities				
Long-term borrowings	30,000	60,000	+30,000	+100
3. Current liabilities				
Trade payables	20,000	60,000	+40,000	+200
Total	3,00,000	4,20,000	+1,20,000	+40
<b>II ASSETS</b>				
1. Non-current assets				
a) Fixed assets	1,00,000	1,50,000	+50,000	+50
b) Non-current investments	50,000	75,000	+25,000	+50
2. Current assets				
Inventories	75,000	1,50,000	+75,000	+100
Cash and cash equivalents	75,000	45,000	-30,000	-40
Total	3,00,000	4,20,000	+1,20,000	+40



### Student activity 8.3

Group activity: Collect published financial statements of similar businesses, from newspapers or business magazines or websites. Compare and analyse them.

## 8.7 Preparation of common-size statements

Common-size statement can be prepared with three columns. Following are the steps to be followed in preparation of common-size statement:

- (i) **Column 1:** In this column, particulars of items of income statement or balance sheet are written.
- (ii) **Column 2:** Enter absolute amount.
- (iii) **Column 3:** Choose a common base as 100. For example, revenue from operations can be taken as the base for income statement and total of balance sheet can be taken as the base for balance sheet. Work out the percentage for all the items of column 2 in terms of the common base and enter them in column 3.

### Format of common-size statement

Particulars	Absolute amount	Percentage

### Illustration 6

From the following particulars of Kumar Ltd, prepare a common-size income statement for the year ended 31<sup>st</sup> March, 2018.

Particulars	2017-18
	₹
Revenue from operations	5,00,000
Other income	20,000
Expenses	3,00,000

### Solution

#### Common-size income statement of Kumar Ltd for the year ended 31<sup>st</sup> March, 2018

Particulars	Absolute amount	Percentage of revenue from operations
	₹	
Revenue from operations	5,00,000	100
Add: Other income	20,000	4
Total revenue	5,20,000	104
Less: Expenses	3,00,000	60
Profit before tax	2,20,000	44

**Note:** Computation of percentage for other income

$$\frac{20,000}{5,00,000} \times 100 = 4\%$$

### Illustration 7

From the following particulars of Mani Ltd and Kani Ltd prepare a common-size income statement for the year ended 31<sup>st</sup> March, 2019.

Particulars	Mani Ltd	Kani Ltd
	₹	₹
Revenue from operations	2,00,000	2,50,000
Other income	30,000	25,000
Expenses	1,10,000	1,25,000

### Solution

#### Common-size income statement for the year ended 31<sup>st</sup> March, 2019

Particulars	Mani Ltd		Kani Ltd	
	Absolute amount	Percentage of revenue from operations	Absolute amount	Percentage of revenue from operations
	₹		₹	
Revenue from operations	2,00,000	100	2,50,000	100
Add: Other income	30,000	15	25,000	10
Total revenue	2,30,000	115	2,75,000	110
Less: Expenses	1,10,000	55	1,25,000	50
Profit before tax	1,20,000	60	1,50,000	60

### Illustration 8

From the following particulars of Siva Ltd, prepare common size income statement for the years ended 31<sup>st</sup> March, 2016 and 31<sup>st</sup> March, 2017.

Particulars	2015-16	2016-17
	₹	₹
Revenue from operations	2,00,000	3,00,000
Other income	25,000	75,000
Expenses	2,50,000	1,50,000
Income tax %	40	40

### Solution

#### Common-size income statement of Siva Ltd for the year ended 31<sup>st</sup> March, 2016 and 31<sup>st</sup> March, 2017

Particulars	Absolute amount 2015-16	Percentage of revenue from operations for 2015-16	Absolute amount 2016-17	Percentage of revenue from operations for 2016-17
	₹		₹	
Revenue from operations	2,00,000	100.00	3,00,000	100
Add: Other income	25,000	12.50	75,000	25
Total revenue	2,25,000	112.50	3,75,000	125
Less: Expenses	2,50,000	125.00	1,50,000	50
Profit / loss before tax	-25,000	-12.50	2,25,000	75
Less: Income tax (40%)	-	-	90,000	30
Profit after tax	-25,000	-12.50	1,35,000	45

### Illustration 9

Prepare common-size balance sheet of Maria Ltd. as on 31<sup>st</sup> March, 2018.

Particulars	31 <sup>st</sup> March 2018
	₹
<b>I EQUITY AND LIABILITIES</b>	
Shareholders' funds	4,00,000
Non-current liabilities	3,20,000
Current liabilities	80,000
Total	8,00,000
<b>II ASSETS</b>	
Non-current assets	6,00,000
Current assets	2,00,000
Total	8,00,000

### Solution

#### Common-size balance sheet of Maria Ltd as on 31<sup>st</sup> March, 2018

Particulars	Absolute amount	Percentage of total assets
	₹	
<b>I EQUITY AND LIABILITIES</b>		
Shareholders' funds	4,00,000	50
Non-current liabilities	3,20,000	40
Current liabilities	80,000	10
Total	8,00,000	100
<b>II ASSETS</b>		
Non-current assets	6,00,000	75
Current assets	2,00,000	25
Total	8,00,000	100

### Illustration 10

Prepare common-size balance sheet of Sharmila Ltd. and Sangeetha Ltd. as on 31<sup>st</sup> March, 2019.

Particulars	Sharmila Ltd	Sangeetha Ltd
	₹	₹
<b>I EQUITY AND LIABILITIES</b>		
Shareholders' funds	5,00,000	11,00,000
Non-current liabilities	4,00,000	7,00,000
Current liabilities	1,00,000	2,00,000
Total	10,00,000	20,00,000
<b>II ASSETS</b>		
Non-current assets	6,50,000	18,00,000
Current assets	3,50,000	2,00,000
Total	10,00,000	20,00,000

## Solution

### Common-size balance sheet of Sharmila Ltd and Sangeetha Ltd as on 31<sup>st</sup> March, 2019

Particulars	Sharmila Ltd		Sangeetha Ltd	
	Absolute amount	Percentage of total assets	Absolute amount	Percentage of total assets
	₹		₹	
<b>I EQUITY AND LIABILITIES</b>				
Shareholders' funds	5,00,000	50	11,00,000	55
Non-current liabilities	4,00,000	40	7,00,000	35
Current liabilities	1,00,000	10	2,00,000	10
Total	10,00,000	100	20,00,000	100
<b>II ASSETS</b>				
Non-current assets	6,50,000	65	18,00,000	90
Current assets	3,50,000	35	2,00,000	10
Total	10,00,000	100	20,00,000	100

## Illustration 11

Prepare common-size statement of financial position of Saleem Ltd as on 31<sup>st</sup> March, 2017 and 31<sup>st</sup> March, 2018.

Particulars	31 <sup>st</sup> March 2017	31 <sup>st</sup> March 2018
	₹	₹
<b>I EQUITY AND LIABILITIES</b>		
1. Shareholders' fund		
a) Share capital	5,00,000	6,00,000
b) Reserves and surplus	4,00,000	3,60,000
2. Non-current liabilities		
Long-term borrowings	8,00,000	2,40,000
3. Current liabilities		
Trade payables	3,00,000	-
Total	20,00,000	12,00,000
<b>II ASSETS</b>		
1. Non-current assets		
a) Fixed assets	10,00,000	6,00,000
b) Non-current investments	5,00,000	2,40,000
2. Current assets		
Inventories	3,00,000	1,20,000
Cash and cash equivalents	2,00,000	2,40,000
Total	20,00,000	12,00,000

## Solution

### Common-size balance sheet of Saleem Ltd as on 31<sup>st</sup> March, 2017 and 31<sup>st</sup> March, 2018

Particulars	Absolute amount on 31 <sup>st</sup> March 2017	Percentage of total assets on 31 <sup>st</sup> March 2017	Absolute amount on 31 <sup>st</sup> March 2018	Percentage of total assets on 31 <sup>st</sup> March 2018
	₹		₹	
<b>I EQUITY AND LIABILITIES</b>				
1. Shareholders' fund				
a) Share capital	5,00,000	25	6,00,000	50
b) Reserves and surplus	4,00,000	20	3,60,000	30
2. Non-current liabilities				
Long-term borrowings	8,00,000	40	2,40,000	20
3. Current liabilities				
Trade payables	3,00,000	15	-	-
Total	20,00,000	100	12,00,000	100
<b>II ASSETS</b>				
1. Non-current assets				
a) Fixed assets	10,00,000	50	6,00,000	50
b) Non – current investments	5,00,000	25	2,40,000	20
2. Current assets				
Inventories	3,00,000	15	1,20,000	10
Cash and cash equivalents	2,00,000	10	2,40,000	20
Total	20,00,000	100	12,00,000	100

## 8.8 Trend analysis

The following steps can be followed to compute trend percentages:

- Take the earliest year as the base year.
- Take the figures for the base year as 100.
- Express the figures for the other years as a percentage to the base year and determine the trend.

### Illustration 12

Calculate trend percentages for the following particulars of Kurinji Ltd.

Particulars	₹ in thousands		
	2015-16	2016-17	2017-18
Revenue from operations	120	132	156
Other income	50	38	65
Expenses	100	135	123



## Solution

### Trend analysis for Kurinji Ltd

Particulars	₹ in thousands			Trend percentages		
	2015-16	2016-17	2017-18	2015-16	2016-17	2017-18
Revenue from operations	120	132	156	100	110	130
Add: Other income	50	38	65	100	76	130
Total revenue	170	170	221	100	100	130
Less: Expenses	100	135	123	100	135	123
Profit	70	35	98	100	50	140

**Note:** Computation of trend percentage for revenue from operations:

$$\text{For 2016-17: } \frac{132}{120} \times 100 = 110\%$$

$$\text{For 2017-18: } \frac{156}{120} \times 100 = 130\%$$

## Illustration 13

From the following information, calculate trend percentages for Mullai Ltd.

Particulars	₹ in lakhs		
	2015-16	2016-17	2017-18
Revenue from operations	100	120	160
Other income	20	24	20
Expenses	20	14	40
Income tax	30%	30%	30%

## Solution

### Trend analysis for Mullai Ltd

Particulars	₹ in lakhs			Trend percentages		
	2015-16	2016-17	2017-18	2015-16	2016-17	2017-18
Revenue from operations	100	120	160	100	120	160
Add: Other income	20	24	20	100	120	100
Total revenue	120	144	180	100	120	150
Less: Expenses	20	14	40	100	70	200
Profit before tax	100	130	140	100	130	140
Less: Income tax (30%)	30	39	42	100	130	140
Profit after tax	70	91	98	100	130	140

### Illustration 14

From the following particulars of Neithal Ltd, calculate trend percentages.

Particulars	₹ in lakhs		
	2015-16	2016-17	2017-18
Revenue from operations	150	135	90
Other income	25	5	15
Expenses	125	75	50
Income tax	40%	40%	40%

### Solution

#### Trend analysis for Neithal Ltd

Particulars	₹ in lakhs			Trend percentages		
	2015-16	2016-17	2017-18	2015-16	2016-17	2017-18
Revenue from operations	150	135	90	100	90	60
Add: Other income	25	5	15	100	20	60
Total revenue	175	140	105	100	80	60
Less: Expenses	125	75	50	100	60	40
Profit before tax	50	65	55	100	130	110
Less: Income tax (40%)	20	26	22	100	130	110
Profit after tax	30	39	33	100	130	110

### Illustration 15

Calculate trend percentages for the following particulars of Palai Ltd.

Particulars	₹ in lakhs		
	Year 1	Year 2	Year 3
<b>I EQUITY AND LIABILITIES</b>			
Shareholders' fund	250	275	300
Non-current liabilities	100	125	100
Current liabilities	50	40	80
Total	400	440	480
<b>II ASSETS</b>			
Non-current assets	300	360	390
Current assets	100	80	90
Total	400	440	480

## Solution

### Trend analysis for Palai Ltd

Particulars	₹ in lakhs			Trend percentages		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
<b>I EQUITY AND LIABILITIES</b>						
Shareholders' fund	250	275	300	100	110	120
Non-current liabilities	100	125	100	100	125	100
Current liabilities	50	40	80	100	80	160
Total	400	440	480	100	110	120
<b>II ASSETS</b>						
Non-current assets	300	360	390	100	120	130
Current assets	100	80	90	100	80	90
Total	400	440	480	100	110	120

### Illustration 16

Compute trend percentages for the following particulars of Boomi Ltd.

Particulars	₹ in lakhs		
	Year 1	Year 2	Year 3
<b>I EQUITY AND LIABILITIES</b>			
1. Shareholders' fund			
a) Share capital	200	254	212
b) Reserves and surplus	60	60	90
2. Non-current liabilities			
Long-term borrowings	140	154	168
3. Current liabilities			
Trade payables	40	60	80
Total	440	528	550
<b>II ASSETS</b>			
1. Non-current assets			
a) Fixed assets	200	236	206
b) Non-current investments	80	100	120
2. Current assets			
Inventories	120	132	144
Cash and cash equivalents	40	60	80
Total	440	528	550

## Solution

### Trend analysis for Boomi Ltd

Particulars	₹ in lakhs			Trend percentages		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
<b>I EQUITY AND LIABILITIES</b>						
1. Shareholders' fund						
a) Share capital	200	254	212	100	127	106
b) Reserves and surplus	60	60	90	100	100	150
2. Non-current liabilities						
Long-term borrowings	140	154	168	100	110	120
3. Current liabilities						
Trade payables	40	60	80	100	150	200
Total	440	528	550	100	120	125
<b>II ASSETS</b>						
1. Non-current assets						
a) Fixed assets	200	236	206	100	118	103
b) Non-current investments	80	100	120	100	125	150
2. Current assets						
Inventories	120	132	144	100	110	120
Cash and cash equivalents	40	60	80	100	150	200
Total	440	528	550	100	120	125



#### Student activity 8.4

Record minimum 4 of your class test marks for Accountancy and other subjects. Analyse your marks using trend percentages.

#### Points to remember

- ❖ The term financial statements generally refer to two basic statements, income statement and balance sheet.
- ❖ Notes and schedules also form part of financial statements.
- ❖ The tools of financial statement analysis include Comparative statement, Common size statement, Trend analysis, Funds flow analysis and Cash flow analysis.
- ❖ A statement giving comparison of net increase or decrease in the individual items of financial statements of two or more years of a business concern is called comparative statement.

- ❖ The common-size statements show the relationship of various items with some common base, expressed as percentage of the common base.
- ❖ Trend analysis refers to the study of movement of figures over a period.

## Self-examination questions

### I Multiple choice questions



#### Choose the correct answer

1. Which of the following statements is not true?
  - a) Notes and schedules also form part of financial statements.
  - b) The tools of financial statement analysis include common-size statement
  - c) Trend analysis refers to the study of movement of figures for one year
  - d) The common-size statements show the relationship of various items with some common base, expressed as percentage of the common base
  
2. Balance sheet provides information about the financial position of a business concern
  - a) Over a period of time
  - b) As on a particular date
  - c) For a period of time
  - d) For the accounting period
  
3. Which of the following tools of financial statement analysis is suitable when data relating to several years are to be analysed?
  - a) Cash flow statement
  - b) Common size statement
  - c) Comparative statement
  - d) Trend analysis
  
4. The financial statements do not exhibit
  - a) Non-monetary data
  - b) Past data
  - c) Short term data
  - d) Long term data
  
5. Which of the following is not a tool of financial statement analysis?
  - a) Trend analysis
  - b) Common size statement
  - c) Comparative statement
  - d) Standard costing
  
6. The term 'fund' refers to
  - a) Current liabilities
  - b) Working capital
  - c) Fixed assets
  - d) Non-current assets
  
7. Which of the following statements is not true?
  - a) All the limitations of financial statements are applicable to financial statement analysis also.
  - b) Financial statement analysis is only the means and not an end.
  - c) Expert knowledge is not required in analysing the financial statements.
  - d) Interpretation of the analysed data involves personal judgement.
  
8. A limited company's sales has increased from ₹ 1,25,000 to ₹ 1,50,000. How does this appear in comparative income statement?
  - a) + 20 %
  - b) + 120 %
  - c) - 120 %
  - d) - 20 %

9. In a common-size balance sheet, if the percentage of non-current assets is 75, what would be the percentage of current assets?  
 a) 175                      b) 125                      c) 25                      d) 100
10. Expenses for a business for the first year were ₹ 80,000. In the second year, it was increased to ₹ 88,000. What is the trend percentage in the second year?  
 a) 10 %                      b) 110 %                      c) 90 %                      d) 11%

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

## II Very short answer questions

1. What are financial statements?
2. List the tools of financial statement analysis.
3. What is working capital?
4. When is trend analysis preferred to other tools?

## III Short answer questions

1. 'Financial statements are prepared based on the past data.' Explain how this is a limitation.
2. Write a short note on cash flow analysis.
3. Briefly explain any three limitations of financial statements.
4. Explain the steps involved in preparing comparative statement.
5. Explain the procedure for preparing common-size statement.

## IV Exercises

### Comparative statement analysis

1. From the following particulars, prepare comparative income statement of Arul Ltd.

Particulars	2015-16 ₹	2016-17 ₹
Revenue from operations	50,000	60,000
Other income	10,000	30,000
Expenses	40,000	50,000

(Answer: Revenue from operations: 20%; Other income: 200%;  
 Total revenue: 50%; Expenses: 25%; Profit before tax: 100%)

2. From the following particulars, prepare comparative income statement of Barani Ltd.

Particulars	2016-17 ₹	2017-18 ₹
Revenue from operations	30,000	45,000
Other income	4,000	6,000
Expenses	10,000	15,000
Income tax	30%	30%

(Answer: Revenue from operations: 50%; Other income: 50%; Total revenue: 50%; Expenses:  
 50%; Profit before tax: 50%; Tax: 50% ; Profit after tax: 50%)

3. From the following particulars, prepare comparative income statement of Daniel Ltd.

Particulars	2015-16 ₹	2016-17 ₹
Revenue from operations	40,000	50,000
Operating expenses	25,000	27,500
Income tax (% of the profit before tax)	30	30

(Answer: Revenue from operations: 25%; Expenses: 10%; Profit before tax: 50%;  
Tax: 50%; Profit after tax: 50%)

4. From the following particulars, prepare comparative statement of financial position of Muthu Ltd.

Particulars	31st March, 2017	31st March, 2018
	₹	₹
<b>I EQUITY AND LIABILITIES</b>		
Shareholders' Fund	4,00,000	4,40,000
Non-current liabilities	1,50,000	1,65,000
Current liabilities	75,000	82,500
Total	6,25,000	6,87,500
<b>II ASSETS</b>		
Non-current assets	5,00,000	6,00,000
Current assets	1,25,000	87,500
Total	6,25,000	6,87,500

(Answer: Shareholder's fund: 10%; Non-current liabilities: 10%; Current liabilities: 10%;  
Total equity and liabilities: 10%; Non-current assets: 20%; Current assets: -30%; Total assets: 10%)

5. From the following particulars, prepare comparative statement of financial position of Kala Ltd.

Particulars	31st March, 2017	31st March, 2018
	₹	₹
<b>I EQUITY AND LIABILITIES</b>		
1. Shareholders' Fund		
a) Share capital	3,00,000	3,60,000
b) Reserves and surplus	50,000	50,000
2. Non-current liabilities		
Long-term borrowings	50,000	40,000
3. Current liabilities		
Trade payables	20,000	12,000
Total	4,20,000	4,62,000

II ASSETS		
1. Non-current assets		
a) Fixed assets	2,50,000	2,90,000
b) Non - current investments	50,000	40,000
2. Current assets		
Inventories	80,000	1,00,000
Cash and cash equivalents	40,000	32,000
<b>Total</b>	<b>4,20,000</b>	<b>4,62,000</b>

(Answer: Share capital: 20%; Reserves and surplus: Nil; Non-current liabilities: -20%; Current liabilities: -40%; Total equity and liabilities: 10%; Fixed assets: 16%; Non-current investments: - 20%; Inventories: 25%; Cash and cash equivalents: -20%; Total assets: 10%)

### Common-size statement

6. Prepare common-size income statement for the following particulars of Raja Ltd. for the year ended 31<sup>st</sup> March, 2017

Particulars	2016-17
	₹
Revenue from operations	4,50,000
Other income	67,500
Expenses	1,35,000

(Answer: 2016-17: Other income: 15%; Total revenue: 115%; Expenses: 30%; Profit before tax: 85%)

7. From the following particulars of Maria Ltd. and Kala Ltd. prepare a common-size income statement for the year ended 31<sup>st</sup> March, 2019.

Particulars	Maria Ltd	Kala Ltd
	₹	₹
Revenue from operations	1,00,000	2,00,000
Other income	10,000	30,000
Expenses	70,000	1,20,000

(Answer: Maria Ltd: Other income: 10%; Total revenue: 110%; Expenses: 70%; Profit before tax: 40%  
Kala Ltd: Other income: 15%; Total revenue: 115%; Expenses: 60%; Profit before tax: 55%)

8. Prepare common-size income statement for the following particulars of Sam Ltd.

Particulars	2015-16	2016-17
	₹	₹
Revenue from operations	4,00,000	5,00,000
Other income	80,000	50,000
Expenses	2,40,000	2,50,000
Income tax	30%	30%

(Answer: 2015-16: Other income: 20%; Total revenue: 120%; Expenses: 60%; Profit before tax: 60%; Tax: 18%; Profit after tax: 42%; 2016-17: Other income: 10%; Total revenue: 110%; Expenses: 50%; Profit before tax: 60%; Tax: 18%; Profit after tax: 42%)



9. Prepare Common-size balance sheet of Meena Ltd. as on 31<sup>st</sup> March, 2018.

Particulars	31 <sup>st</sup> March 2018
	₹
<b>I EQUITY AND LIABILITIES</b>	
Shareholders' funds	2,00,000
Non-current liabilities	1,60,000
Current liabilities	40,000
Total	4,00,000
<b>II ASSETS</b>	
Non-current assets	3,00,000
Current assets	1,00,000
Total	4,00,000

(Answer: Shareholder's fund: 50%; Non-current liabilities: 40%; Current liabilities: 10%;  
Non-current assets: 75%; Current assets: 25%)

10. Prepare common-size statement of financial position for the following particulars of Rani Ltd.

Particulars	31st March, 2016	31st March, 2017
	₹	₹
<b>I EQUITY AND LIABILITIES</b>		
Shareholders' Fund	5,40,000	6,00,000
Non-current liabilities	2,70,000	2,50,000
Current liabilities	90,000	1,50,000
Total	9,00,000	10,00,000
<b>II ASSETS</b>		
Non-current assets	7,20,000	8,00,000
Current assets	1,80,000	2,00,000
Total	9,00,000	10,00,000

(Answer: 2015-16: Shareholder's fund: 60%; Non-current liabilities: 30%; Current liabilities: 10%; Non-current assets: 80%; Current assets: 20%; 2016-17: Shareholder's fund: 60%; Non-current liabilities: 25%; Current liabilities: 15%; Non-current assets: 80%; Current assets: 20%)

11. Prepare common-size statement of financial position for the following particulars of Yasmin Ltd. and Sakthi Ltd.

Particulars	Yasmin Ltd.	Sakthi Ltd.
	₹	₹
<b>I EQUITY AND LIABILITIES</b>		
1. Shareholders' Fund		
a) Share capital	2,00,000	3,00,000
b) Reserves and surplus	50,000	60,000
2. Non-current liabilities		
Long-term borrowings	1,50,000	1,80,000
3. Current liabilities		
Trade payables	1,00,000	60,000
Total	5,00,000	6,00,000

**II ASSETS**

1. Non-current assets		
a) Fixed assets	2,00,000	3,00,000
b) Non - current investments	50,000	1,20,000
2. Current assets		
Inventories	2,00,000	90,000
Cash and cash equivalents	50,000	90,000
<b>Total</b>	<b>5,00,000</b>	<b>6,00,000</b>

(Answer: Yasmin Ltd: Share capital: 40%; Reserves and surplus: 10%; Non-current liabilities: 30%; Current liabilities: 20%; Fixed assets: 40%; Non- current investments: 10%; Inventories: 40%; Cash & cash equivalents: 10% Sakthi Ltd: Share capital: 50%; Reserves and surplus: 10%; Non-current liabilities: 30%; Current liabilities: 10%; Fixed assets: 50%; Non- current investments: 20%; Inventories: 15%; Cash & cash equivalents: 15%)

**Trend analysis**

12. From the following particulars, calculate the trend percentages of Kala Ltd.

Particulars	₹ in thousands		
	2015-16	2016-17	2017-18
Revenue from operations	400	500	600
Other income	100	150	200
Expenses	200	290	350

(Answer: 2016-17: Revenue from operations: 125%; Other income: 150%; Total revenue: 130%; Expenses: 145%; Profit before tax: 120% 2017-18: Revenue from operations: 150%; Other income: 200%; Total revenue: 160%; Expenses: 175%; Profit before tax: 150%)

13. From the following particulars, calculate the Trend percentages of Kavitha Ltd.

Particulars	₹ in thousands		
	2015-16	2016-17	2017-18
Revenue from operations	100	125	150
Other income	20	25	30
Expenses	100	120	80
Income tax	30%	30%	30%

(Answer: 2016-17: Revenue from operations: 125%; Other income: 125%; Total revenue: 125%; Expenses: 120%; Profit before tax: 150%; Tax: 150%; Profit after tax: 150%; 2017-18: Revenue from operations: 150%; Other income: 150%; Total revenue: 150%; Expenses: 80%; Profit before tax: 500%; Tax: 500%; Profit after tax: 500%)

14. From the following particulars, calculate the trend percentages of Kumar Ltd.

Particulars	₹ in thousands		
	2015-16	2016-17	2017-18
Revenue from operations	300	270	150
Other income	50	80	60
Expenses	250	200	125
Income tax %	40	40	40

(Answer: 2016-17: Revenue from operations: 90%; Other income: 160%; Total revenue: 100%; Expenses: 80%; Profit before tax: 150%; Tax: 150%; Profit after tax: 150%; 2017-18: Revenue from operations: 50%; Other income: 120%; Total revenue: 60%; Expenses: 50%; Profit before tax: 85%; Tax: 85%; Profit after tax: 85%)

15. From the following particulars, calculate the trend percentages of Anu Ltd.

Particulars	₹ in thousands		
	Year 1	Year 2	Year 3
<b>I EQUITY AND LIABILITIES</b>			
Shareholders' Fund	500	550	600
Non-current liabilities	200	250	240
Current liabilities	100	80	120
Total	800	880	960
<b>II ASSETS</b>			
Non-current assets	600	720	780
Current assets	200	160	180
Total	800	880	960

(Answer: Year 2: Shareholder's fund: 110%; Non-current liabilities: 125%; Current liabilities: 80%; Total equity and liabilities: 110%; Non-current assets: 120%; Current assets: 80%; Total assets: 110%; Year 3: Shareholder's fund: 120%; Non-current liabilities: 120%; Current liabilities: 120%; Total equity and liabilities: 120%; Non-current assets: 130%; Current assets: 90%; Total assets: 120%)

16. From the following particulars, calculate the trend percentages of Babu Ltd.

Particulars	₹ in thousands		
	Year 1	Year 2	Year 3
<b>I EQUITY AND LIABILITIES</b>			
1. Shareholders' Fund			
a) Share capital	100	127	106
b) Reserves and surplus	30	30	45
2. Non-current liabilities			
Long-term borrowings	70	77	84
3. Current liabilities			
Trade payables	20	30	40
Total	220	264	275
<b>II ASSETS</b>			
1. Non-current assets			
a) Fixed assets	100	118	103
b) Non current investments	40	50	60
2. Current assets			
Inventories	60	66	72
Cash and cash equivalent	20	30	40
Total	220	264	275

(Answer: Year 2: Share capital: 127%; Reserves and surplus: 100%; Non-current liabilities: 110%; Current liabilities: 150%; Total equity and liabilities: 120%; Fixed assets: 118%; Non-current investments: 125%; Inventories: 110%; Cash & cash equivalents: 150%; Total assets: 120%; Year 3: Share capital: 106%; Reserves and surplus: 150%; Non-current liabilities: 120%; Current liabilities: 200%; Total equity and liabilities: 125%; Fixed assets: 103%; Non-current investments: 150%; Inventories: 120%; Cash & cash equivalents: 200%; Total assets: 125%)

### CASE STUDY

Ravi and Raheem entered into a partnership business of buying and selling of electronic goods. Their business was successful. They wanted to expand their business. But, they did not have enough money to do so. Hence, they converted it into a private limited company and registered it as Ravi and Raheem Ltd. In the first two years, they were busy with the legal formalities, recruitment of staff and maintenance of many accounting records. They prepared financial statements as prescribed by the Companies Act, 2013. After five years, they were so curious to know if the business was performing well. They compared their business results with that of a sole trader's business.

Now, discuss the following:

Who would be interested to assess Ravi and Raheem Ltd's financial statements and why?

Why does Ravi and Raheem Ltd need to follow Companies Act, 2013, in the preparation of financial statements?

Suggest some tools for Ravi and Raheem Ltd to analyse its financial statements.

Which would be the best tool to analyse, if Ravi and Raheem Ltd wants to compare data of more than three years?

Ravi and Raheem Ltd wants to know if their employees are skilled and motivated. Is it possible to analyse this from its financial statements?

What do you think of Ravi and Raheem Ltd's decision of comparing its results with that of a sole trader? Will it give a fair result?

### To explore further

Is it possible to combine the numerous figures in the financial statements under common heads and analyse financial statements?

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# UNIT 9

## RATIO ANALYSIS



### Contents

- 9.1. Introduction
- 9.2. Meaning of accounting ratios
- 9.3. Meaning and definition of ratio analysis
- 9.4. Objectives of ratio analysis
- 9.5. Classification of ratios
- 9.6. Computation of ratios
- 9.7. Advantages of ratio analysis
- 9.8. Limitations of ratio analysis



### Points to recall

The following points are to be recalled before learning ratio analysis:

- ◇ Statement of profit and loss
- ◇ Balance sheet
- ◇ Gross profit
- ◇ Net profit
- ◇ Cost of goods sold



### Learning objectives

To enable the students to

- ◇ Understand the meaning and classification of accounting ratios
- ◇ Calculate various ratios



### Key terms to know

- ◇ Ratio
- ◇ Ratio analysis
- ◇ Liquidity ratios
- ◇ Long term solvency ratios
- ◇ Profitability ratios
- ◇ Turnover ratios
- ◇ Shareholders' funds

## 9.1 Introduction



### Student activity 9.1

**Read the following statement.**

A sole trader earns ₹ 1,00,000 per annum from business.

- Is this a high profit? State the reasons.
- Do you think the above information is enough to say that it is high profit or not?
- What more information, do you need to decide that the trader's business' performance is good?

Think on the above points and discuss in the class.

The financial status and operational performance of business entities can be assessed through financial analysis. Analysis of financial statements involves study of items in the financial statements and making a logical conclusion. There are various tools available for financial analysis such as common size statement, comparative statement, ratio analysis, cash flow analysis, etc. Ratio analysis is one of the important tools of financial analysis. Ratio analysis involves computation of various ratios for analysing the financial statements. It is the most important and powerful tool for measuring performance of a business enterprise.

### 9.2. Meaning of accounting ratios

Ratio is a mathematical expression of relationship between two related or interdependent items. It is the numerical or quantitative relationship between two items. It is calculated by dividing one item by the other related item. When ratios are calculated on the basis of accounting information, these are called 'accounting ratios'.

Accounting ratios can be expressed in any of the following forms:

- Pure:** It is expressed as a quotient. Example: 2 or 2:1.
- Percentage:** It is expressed in percentage. Example: 25%.
- Times:** It is expressed as certain number of times of a particular figure. Example: 4 times.

### 9.3. Meaning and definition of ratio analysis

Ratio analysis is a tool which involves analysing the financial statements by calculating various ratios. It is a tool of financial statement analysis, in which, inferences are drawn based on the computation and analysis of different ratios.

According to Myers, "Ratio analysis is a study of relationship among various financial factors in a business".

## 9.4. Objectives of ratio analysis

Following are the objectives of ratio analysis:

- (i) To simplify accounting figures
- (ii) To facilitate analysis of financial statements
- (iii) To analyse the operational efficiency of a business
- (iv) To help in budgeting and forecasting
- (v) To facilitate intra firm and inter firm comparison of performance

## 9.5. Classification of ratios

Ratios may be classified in the following two ways:

- (i) Traditional classification
- (ii) Functional classification

### 9.5.1. Traditional classification

Traditional classification of ratios is done on the basis of the financial statements from which the ratios are calculated. Under the traditional classification, the ratios are classified as: (i) Balance sheet ratios, (ii) Income statement ratios and (iii) Inter-statement ratios.

Figure 9.1 shows some of the examples of ratios as per traditional classification:

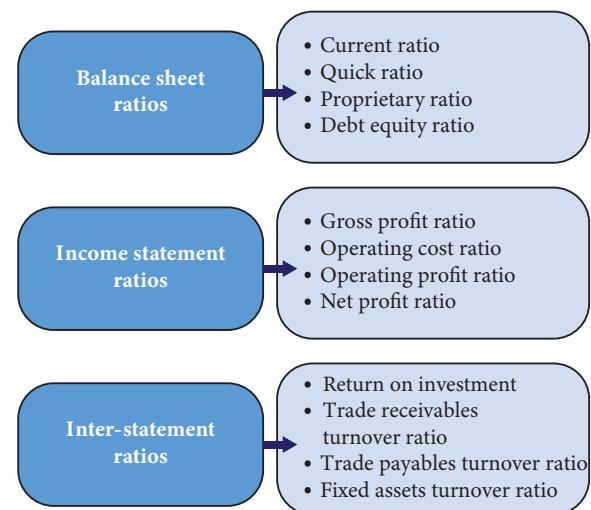


Figure 9.1 Traditional classification of ratios

#### (i) Balance sheet ratio

If both items in a ratio are from balance sheet, it is classified as balance sheet ratio.

#### (ii) Income statement ratio

If the two items in a ratio are from income statement, it is classified as income statement ratio.

#### (iii) Inter-statement ratio

If a ratio is computed with one item from income statement and another item from balance sheet, it is called inter-statement ratio.

### 9.5.2. Functional classification

Functional classification of ratios is based on the purpose for which ratios are computed and it is the most commonly used classification. Under the functional classification, the ratios are classified as follows:

- (i) Liquidity ratios
- (ii) Long term solvency ratios

(iii) Turnover ratios

(iv) Profitability ratios

Figure 9.2 shows some of the examples of ratios as per functional classification:

## 9.6 Computation of ratios

### 9.6.1 Liquidity ratios

Liquidity means capability of being converted into cash with ease. Liquidity ratios help to assess the ability of a business concern to meet its short term financial obligations. Short term assets (current assets) are more liquid as compared to long term assets (fixed assets). Liquidity ratios are also called as short term solvency ratios.

Liquidity ratios include: (i) Current ratio and (ii) Quick ratio.

#### (i) Current ratio

Current ratio gives the proportion of current assets to current liabilities of a business concern. It is computed by dividing current assets by current liabilities. Current ratio indicates the ability of an entity to meet its current liabilities as and when they are due for payment. It is calculated as follows:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

Current assets	Current liabilities
Current assets are those assets that are either in the form of cash or cash equivalents or can be converted into cash or cash equivalents in a short time, that is, within a year or within the period of an operating cycle.	Current liabilities are those liabilities which are repayable in short time, that is, within a year or within the period of an operating cycle.
<b>Current assets include</b> (i) Current investments (ii) Inventories (stock) (iii) Trade receivables (Bills receivable and sundry debtors less provision for doubtful debts) (iv) Cash and cash equivalents (Cash in hand, cash at bank, etc.) (v) Short-term loans and advances given (vi) Other current assets (Prepaid expenses, accrued income, etc)	<b>Current liabilities include</b> (i) Short-term borrowings (ii) Trade payables (Bills payable and sundry creditors) (iii) Other current liabilities (Expenses payable, income received in advance, etc.) (iv) Short-term provisions

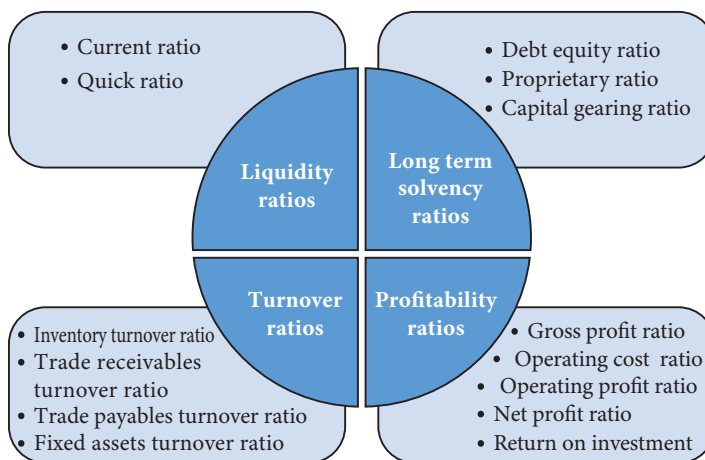


Figure 9.2 Functional classification of ratios



Higher the current ratio, the better is the liquidity position, as the firm will be in a better position to pay its current liabilities. However, a much higher ratio may indicate inefficient investment policies of the management.



Operating cycle is the time between the acquisition of an asset for processing and its realisation into cash and cash equivalents.

### Illustration 1

Calculate current ratio from the following information:

Particulars	₹	Particulars	₹
Current investments	80,000	Trade creditors	1,60,000
Inventories	1,60,000	Bills payable	1,00,000
Trade receivables	4,00,000	Expenses payable	1,40,000
Cash and cash equivalents	1,20,000		
Prepaid expenses	40,000		

### Solution

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} = \frac{8,00,000}{4,00,000} = 2:1$$

$$\begin{aligned} \text{Current assets} &= \text{Current investments} + \text{Inventories} + \text{Trade receivables} \\ &\quad + \text{Cash and cash equivalents} + \text{Prepaid expenses} \\ &= 80,000 + 1,60,000 + 4,00,000 + 1,20,000 + 40,000 = ₹ 8,00,000 \end{aligned}$$

$$\begin{aligned} \text{Current liabilities} &= \text{Trade creditors} + \text{Bills payable} + \text{Expenses payable} \\ &= 1,60,000 + 1,00,000 + 1,40,000 = ₹ 4,00,000 \end{aligned}$$

### (ii) Quick ratio

Quick ratio gives the proportion of quick assets to current liabilities. It indicates whether the business concern is in a position to pay its current liabilities as and when they become due, out of its quick assets. Quick assets are current assets excluding inventories and prepaid expenses. It is otherwise called liquid ratio or acid test ratio. It is calculated as follows:

$$\text{Quick ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}}$$

$$\text{Quick assets} = \text{Current assets} - \text{Inventories} - \text{Prepaid expenses}$$

Higher the quick ratio, better is the short-term financial position of an enterprise.



Inventory is not considered as liquid asset because it takes some time to sell the inventory and to convert into cash. Similarly, prepaid expenses are not considered as liquid assets because these are expenses paid in advance. These cannot be converted into cash and only the benefit can be derived and are thus excluded from liquid assets.



Normally, 2:1 is considered as ideal current ratio; 1:1 is considered as ideal quick ratio. However, it is subject to change from business to business and industry to industry.

### Illustration 2

Calculate quick ratio of Ananth Constructions Ltd from the information given below.

Particulars	₹
Total current liabilities	1,00,000
Total current assets	2,50,000
Inventories	50,000
Prepaid expenses	15,000

### Solution

$$\text{Quick ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}} = \frac{1,85,000}{1,00,000} = 1.85:1$$

$$\begin{aligned}\text{Quick assets} &= \text{Current assets} - \text{Inventories} - \text{Prepaid expenses} \\ &= 2,50,000 - 50,000 - 15,000 \\ &= ₹ 1,85,000\end{aligned}$$

### Illustration 3

Following is the balance sheet of Magesh Ltd. as on 31st March, 2019:

Particulars	₹
<b>I EQUITY AND LIABILITIES</b>	
1. Shareholders' funds	
Equity share capital	2,00,000
2. Non-current liabilities	
Long term borrowings	50,000
3. Current liabilities	
(a) Short-term borrowings	17,000
(b) Trade payables	25,000
(c) Other current liabilities	
Expenses payable	3,000
(d) Short-term provisions	5,000
<b>Total</b>	<b>3,00,000</b>

II ASSETS	₹
1. Non-current assets	
Fixed assets	
(a) Tangible assets	1,50,000
2. Current assets	
(a) Inventories	45,000
(b) Trade receivables	70,000
(c) Cash and cash equivalents	30,000
(d) Other current assets	
Prepaid expenses	5,000
<b>Total</b>	<b>3,00,000</b>

Calculate: (i) Current ratio (ii) Quick ratio

### Solution

$$(i) \text{ Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} = \frac{1,50,000}{50,000} = 3:1$$

$$\begin{aligned} \text{Current assets} &= \text{Inventories} + \text{Trade receivables} + \text{Cash and cash equivalents} \\ &+ \text{Prepaid expenses} \\ &= 45,000 + 70,000 + 30,000 + 5,000 = ₹ 1,50,000 \end{aligned}$$

$$\begin{aligned} \text{Current liabilities} &= \text{Short term borrowings} + \text{Trade payables} + \text{Expenses payable} \\ &+ \text{Short term provisions} \\ &= 17,000 + 25,000 + 3,000 + 5,000 = ₹ 50,000 \end{aligned}$$

$$(ii) \text{ Quick ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}} = \frac{1,00,000}{50,000} = 2:1$$

$$\begin{aligned} \text{Quick assets} &= \text{Total current assets} - \text{Inventories} - \text{Prepaid expenses} \\ &= 1,50,000 - 45,000 - 5,000 = ₹ 1,00,000 \end{aligned}$$



### Student activity 9.2

Collect data, from five similar sole trading businesses, on current assets and current liabilities as on a particular date. Calculate liquidity ratios and compare their liquidity position.

### 9.6.2. Long term solvency ratios

Long term solvency means the firm's ability to meet its liabilities in the long run. Long term solvency ratios help to determine the ability of the business to repay its debts in the long run. The following ratios are normally computed for evaluating long term solvency of the business:

- (i) Debt equity ratio
- (ii) Proprietary ratio
- (iii) Capital gearing ratio

**(i) Debt equity ratio**

Debt equity ratio is calculated to assess the long term solvency position of a business concern. Debt equity ratio expresses the relationship between long term debt and shareholders' funds. It is computed as follows:

$$\text{Debt equity ratio} = \frac{\text{Long term debt}}{\text{Shareholders' funds}}$$

Long term debt	Shareholders' funds
Long term debt includes debentures, bonds, long term loans and other long term borrowings.	Shareholders' funds = Equity share capital + Preference share capital + Reserves and surplus



- Debit balance in the statement of profit and loss is shown as a negative figure under the head Reserves and surplus.
- Shareholders' funds can also be computed as follows:

$$\text{Shareholders' funds} = \text{Total assets} - \text{Non current liabilities} - \text{Current liabilities}$$

In general, lower the debt equity ratio, lower is the risk to the long-term lenders. A high ratio indicates high risk as it may be difficult for the business concern to meet the obligation to outsiders.



In general, a debt equity ratio of 1:1 may be considered satisfactory. However, it is subject to change from business to business and industry to industry.

**Illustration 4**

From the following information, calculate debt equity ratio:

**Balance sheet (Extract) as on 31.03.2018**

Particulars	₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	
Equity share capital	1,00,000
(b) Reserves and surplus	60,000
<b>2. Non-current liabilities</b>	
Long-term borrowings (Debentures)	80,000
<b>3. Current liabilities</b>	
(a) Trade payables	50,000
(b) Other current liabilities	
Outstanding expenses	30,000
<b>Total</b>	<b>3,20,000</b>

### Solution

$$\text{Debt equity ratio} = \frac{\text{Long term debt}}{\text{Shareholders' funds}} = \frac{80,000}{1,60,000} = 0.5:1$$

Long term debt = Debentures = ₹ 80,000

Shareholders' funds = Equity share capital + Reserves and surplus  
= 1,00,000 + 60,000 = ₹ 1,60,000

### (ii) Proprietary ratio

Proprietary ratio gives the proportion of shareholders' funds to total assets. Proprietary ratio shows the extent to which the total assets have been financed by the shareholders' funds. It is calculated as follows:

$$\text{Proprietary ratio} = \frac{\text{Shareholders' funds}}{\text{Total assets}}$$

Higher the proprietary ratio, greater is the satisfaction for lenders and creditors, as the firm is less dependent on external sources of finance.

### Illustration 5

From the following Balance Sheet of Pioneer Ltd. calculate proprietary ratio:

**Balance sheet of Pioneer Ltd. as on 31.3.2019**

Particulars	₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	
(i) Equity share capital	1,00,000
(ii) Preference share capital	75,000
(b) Reserves and surplus	25,000
<b>2. Non-current liabilities</b>	
Long-term borrowings	-
<b>3. Current liabilities</b>	
Trade payables	2,00,000
<b>Total</b>	<b>4,00,000</b>
<b>II ASSETS</b>	
<b>1. Non-current assets</b>	
(a) Fixed assets	2,75,000
(b) Non-current investments	50,000
<b>2. Current assets</b>	
Cash and Cash equivalents	75,000
<b>Total</b>	<b>4,00,000</b>

### Solution

$$\text{Proprietary ratio} = \frac{\text{Shareholders' funds}}{\text{Total assets}} = \frac{2,00,000}{4,00,000} = 0.5:1$$

$$\begin{aligned} \text{Shareholders' funds} &= \text{Equity share capital} + \text{Preference share capital} + \text{Reserves and surplus} \\ &= 1,00,000 + 75,000 + 25,000 \\ &= ₹ 2,00,000 \end{aligned}$$

### (iii) Capital gearing ratio

Capital gearing ratio is the proportion of fixed income bearing funds to equity shareholders' funds. Fixed income bearing funds include fixed interest and fixed dividend bearing funds. It is calculated as follows:

$$\text{Capital gearing ratio} = \frac{\text{Funds bearing fixed interest and fixed dividend}}{\text{Equity shareholders' funds}}$$

Funds bearing fixed interest or fixed dividend	Equity shareholders' funds
Preference share capital	Equity shareholders' funds = Equity share capital + Reserves and surplus
Debentures	
Bonds	
Long term borrowings carrying fixed interest	

Capital gearing ratio is a measure of long term solvency as well as capital structure. When the capital gearing ratio is greater than one, the firm is said to be high geared.

### Illustration 6

From the following information calculate capital gearing ratio:

#### Balance Sheet (Extract) as on 31.03.2018

Particulars	₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	
Equity share capital	2,00,000
6% Preference share capital	1,00,000
(b) Reserves and surplus	
General reserve	1,25,000
Surplus	75,000
<b>2. Non-current liabilities</b>	
Long-term borrowings (8% Debentures)	2,00,000
<b>3. Current liabilities</b>	
Trade payables	1,50,000
Provision for tax	50,000
<b>Total</b>	<b>9,00,000</b>

$$\begin{aligned} \text{Capital gearing ratio} &= \frac{\text{Funds bearing fixed interest and fixed dividend}}{\text{Equity shareholders' funds}} \\ &= \frac{3,00,000}{4,00,000} = 0.75:1 \end{aligned}$$

$$\begin{aligned} \text{Funds bearing fixed interest and dividend} &= 6\% \text{ Preference share capital} + 8\% \text{ Debentures} \\ &= 1,00,000 + 2,00,000 = ₹ 3,00,000 \end{aligned}$$

$$\begin{aligned} \text{Equity shareholder's funds} &= \text{Equity share capital} + \text{General reserve} + \\ &\quad \text{Surplus} \\ &= 2,00,000 + 1,25,000 + 75,000 = ₹ 4,00,000 \end{aligned}$$

### Illustration 7

From the following Balance Sheet of Arunan Ltd. as on 31.03.2019 calculate  
(i) Debt-equity ratio (ii) Proprietary ratio and (iii) Capital gearing ratio.

#### Balance Sheet of Arunan Ltd. as on 31.03.2019

Particulars	₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	
Equity share capital	1,50,000
8% Preference share capital	2,00,000
(b) Reserves and surplus	1,50,000
<b>2. Non current liabilities</b>	
Long term borrowings (9% Debentures)	4,00,000
<b>3. Current liabilities</b>	
Short-term borrowings from banks	25,000
Trade payables	75,000
<b>Total</b>	<b>10,00,000</b>
<b>II ASSETS</b>	
<b>1. Non-current assets</b>	
Fixed assets	7,50,000
<b>2. Current assets</b>	
(a) Inventories	1,20,000
(b) Trade receivables	1,00,000
(c) Cash and cash equivalents	27,500
(d) Other current assets	
Expenses paid in advance	2,500
<b>Total</b>	<b>10,00,000</b>

### Solution

$$(i) \text{ Debt equity ratio} = \frac{\text{Long term debt}}{\text{Shareholders' funds}} = \frac{4,00,000}{5,00,000} = 0.8:1$$

$$\text{Long term debt} = 9\% \text{ Debentures} = ₹ 4,00,000$$

$$\begin{aligned} \text{Shareholders' funds} &= \text{Equity share capital} + \text{Preference share capital} + \text{Reserves and surplus} \\ &= 1,50,000 + 2,00,000 + 1,50,000 = ₹ 5,00,000 \end{aligned}$$

$$(ii) \text{ Proprietary ratio} = \frac{\text{Shareholders' funds}}{\text{Total assets}} = \frac{5,00,000}{10,00,000} = 0.5:1$$

$$(iii) \text{ Capital gearing ratio} = \frac{\text{Funds bearing fixed interest and dividend}}{\text{Equity Shareholders' funds}} = \frac{6,00,000}{3,00,000} = 2:1$$

$$\begin{aligned} \text{Funds bearing fixed interest or dividend} &= 8\% \text{ Preference share capital} + 9\% \text{ Debentures} \\ &= 2,00,000 + 4,00,000 = ₹ 6,00,000 \\ \text{Equity shareholders' funds} &= \text{Equity share capital} + \text{Reserves and surplus} \\ &= 1,50,000 + 1,50,000 = ₹ 3,00,000 \end{aligned}$$

### 9.6.3. Turnover ratios

Turnover ratios show how efficiently assets or other items have been used to generate revenue from operations. They are also called as activity ratios or efficiency ratios. They show the speed of movement of various items. They are expressed as number of times in relation to the item compared.

The important turnover ratios are:

- (i) Inventory turnover ratio
- (ii) Trade receivables turnover ratio
- (iii) Trade payables turnover ratio
- (iv) Fixed assets turnover ratio

#### (i) Inventory turnover ratio

It indicates the number of times inventory is turned over to make revenue from operations (sales) during a particular accounting period. It is a comparison of cost of revenue from operations (cost of goods sold) with average amount of inventory during a given period. It is calculated as under:

$$\text{Inventory turnover ratio} = \frac{\text{Cost of revenue from operations}}{\text{Average inventory}}$$

$$\begin{aligned} \text{Cost of revenue from operations} &= \text{Purchases of stock in trade} + \text{Changes in inventories of} \\ &\quad \text{finished goods} + \text{Direct expenses} \\ &\quad \text{(or)} \\ &= \text{Revenue from operations} - \text{Gross profit} \end{aligned}$$

#### Tutorial note

Revenue from operations is the net sales.

$$\text{Changes in inventory} = \text{Opening inventory} - \text{Closing inventory}$$

$$\begin{aligned} \text{Direct expenses} &= \text{Wages} + \text{Carriage inwards} + \text{Freight inwards} \\ &\quad + \text{Dock charges} + \text{Octroi} + \text{Import duty} + \text{Coal, gas, fuel} \\ &\quad \text{and power} + \text{Other direct expenses} \end{aligned}$$

$$\text{Average inventory} = \frac{\text{Opening inventory} + \text{Closing inventory}}{2}$$

Cost of revenue from operations is taken because the inventory is always valued at cost except when net realisable value is lower than cost, it is valued at net realisable value. Greater the inventory turnover ratio, greater is the efficiency in the movement of stock. However, high inventory turnover ratio may also be due to insufficient inventory, buying in small quantities, etc. Similarly, a low inventory turnover ratio may be due to inclusion of obsolete items in inventory, etc. Hence, inventory turnover ratio must be analysed together with the related items.



### Tutorial note

In the absence of opening inventory, closing inventory can be taken instead of average inventory.

### Inventory conversion period

Inventory conversion period is the time taken to sell the inventory. A shorter inventory conversion period indicates more efficiency in the management of inventory. It is computed as follows:

$$\text{Inventory conversion period (in days)} = \frac{\text{Number of days in a year}}{\text{Inventory turnover ratio}}$$

$$\text{Inventory conversion period (in months)} = \frac{\text{Number of months in a year}}{\text{Inventory turnover ratio}}$$

### Illustration 8

From the given information calculate the inventory turnover ratio and inventory conversion period (in months) of Sania Ltd.

Particulars	₹
Revenue from operations	1,90,000
Inventory at the beginning of the year	40,000
Inventory at the end of the year	20,000
Purchases made during the year	90,000
Carriage inwards	10,000

### Solution

$$\text{Inventory turnover ratio} = \frac{\text{Cost of revenue from operations}}{\text{Average inventory}} = \frac{1,20,000}{30,000} = 4 \text{ times}$$

Cost of revenue from operations

$$\begin{aligned} &= \text{Opening inventory} + \text{Net Purchases} + \text{Direct expenses} \\ &\quad (\text{carriage inwards}) - \text{Closing inventory} \\ &= 40,000 + 90,000 + 10,000 - 20,000 \\ &= ₹ 1,20,000 \end{aligned}$$

$$\begin{aligned} \text{Average inventory} &= \frac{\text{Opening inventory} + \text{Closing inventory}}{2} \\ &= \frac{40,000 + 20,000}{2} = ₹ 30,000 \end{aligned}$$

$$\text{Inventory conversion period (in months)} = \frac{\text{Number of months in a year}}{\text{Inventory turnover ratio}} = \frac{12}{4} = 3 \text{ months}$$

## (ii) Trade receivables turnover ratio

Trade receivables turnover ratio is the comparison of credit revenue from operations with average trade receivables during an accounting period. It gives the velocity of collection of cash from trade receivables. It is calculated as follows:

$$\text{Trade receivables turnover ratio} = \frac{\text{Credit revenue from operations}}{\text{Average trade receivables}}$$

$$\text{Average trade receivables} = \frac{\text{Opening trade receivables} + \text{Closing trade receivables}}{2}$$

$$\text{Trade receivables} = \text{Trade debtors} + \text{Bills receivable}$$

Credit revenue from operations (net credit sales) is taken for trade receivables turnover ratio as trade receivables arise only from credit sales. Greater the trade receivables turnover ratio, greater is the efficiency of management in collection of receivables.

### Tutorial note

In the absence of opening trade receivables, closing trade receivables can be taken instead of average trade receivables to calculate the ratio.

### Debt collection period

Debt collection period is the average time taken to collect the amount due from trade receivables. Lesser the debt collection period, greater is the efficiency of management in collection of cash from trade receivables. It is calculated as follows:

$$\text{Debt collection period (in days)} = \frac{\text{Number of days in a year}}{\text{Trade receivables turnover ratio}}$$

$$\text{Debt collection period (in months)} = \frac{\text{Number of months in a year}}{\text{Trade receivables turnover ratio}}$$

### Illustration 9

The credit revenue from operations of Harini Ltd. amounted to ₹ 9,60,000. Its debtors and bills receivable at the end of the accounting period amounted to ₹ 1,00,000 and ₹ 60,000 respectively. Calculate trade receivable turnover ratio and also collection period in months.

### Solution

$$\text{Trade receivables turnover ratio} = \frac{\text{Credit revenue from operations}}{\text{Average trade receivables}} = \frac{9,60,000}{1,60,000} = 6 \text{ times.}$$

$$\text{Trade receivables} = \text{Debtors} + \text{Bills receivable} = 1,00,000 + 60,000 = ₹ 1,60,000$$

### Tutorial note

Closing trade receivables are taken instead of average trade receivables as the opening trade receivables are not given.

$$\text{Debt collection period} = \frac{\text{Number of months in a year}}{\text{Trade receivables turnover ratio}} = \frac{12}{6} = 2 \text{ months}$$

### (iii) Trade payables turnover ratio

Trade payables turnover ratio is the comparison of net credit purchases with average trade payables during an accounting period. It gives the velocity of payment of cash towards trade payables. It is calculated as follows:

$$\text{Trade payables turnover ratio} = \frac{\text{Net credit purchases}}{\text{Average trade payables}}$$

$$\text{Net credit purchases} = \text{Total credit purchases} - \text{Purchases returns}$$

$$\text{Average trade payables} = \frac{\text{Opening trade payables} + \text{Closing trade payables}}{2}$$

$$\text{Trade payables} = \text{Trade creditors} + \text{Bills payable}$$

Greater the trade payable turnover ratio, better is the efficiency of the management in managing trade payable as it indicates that amount due to suppliers are settled quicker.

#### Tutorial note

In the absence of opening trade payables, closing trade payables can be taken instead of average trade payables.

### Credit payment period

It is the average time taken by the business for payment of accounts payable. Lesser the credit payment period, greater is the efficiency of the management in managing accounts payable as it indicates quicker settlement of trade payables. It is calculated as follows:

$$\text{Credit payment period (in days)} = \frac{\text{Number of days in a year}}{\text{Trade payables turnover ratio}}$$

$$\text{Credit payment period (in months)} = \frac{\text{Number of months in a year}}{\text{Trade payables turnover ratio}}$$

### Illustration 10

From the following figures obtained from Kalpana Ltd, calculate the trade payables turnover ratio and credit payment period (in days).

Particulars	₹
Credit purchases during 2018 – 2019	1,00,000
Trade creditors as on 1.4.2018	20,000
Trade creditors as on 31.3.2019	10,000
Bills payable as on 1.4.2018	4,000
Bills payable as on 31.3.2019	6,000

### Solution

$$\text{Trade payables turnover ratio} = \frac{\text{Net credit purchases}}{\text{Average trade payables}} = \frac{1,00,000}{20,000} = 5 \text{ times}$$

$$\begin{aligned} \text{Average trade payables} &= \frac{\text{Opening trade payables} + \text{Closing trade payables}}{2} \\ &= \frac{(20,000 + 4,000) + (10,000 + 6,000)}{2} = \frac{40,000}{2} = ₹ 20,000 \end{aligned}$$

$$\begin{aligned} \text{payment period} &= \frac{\text{Number of days in a year}}{\text{Trade payables turnover ratio}} = \frac{365}{5} = 73 \text{ days.} \\ \text{(in days)} & \end{aligned}$$

### (iv) Fixed assets turnover ratio

Fixed assets turnover ratio gives the number of times the fixed assets are turned over during the year in relation to the revenue from operations. This ratio indicates the efficiency of utilisation of fixed assets.

$$\text{Fixed assets turnover ratio} = \frac{\text{Revenue from operations}}{\text{Average fixed assets}}$$

$$\text{Average fixed assets} = \frac{\text{Opening fixed assets} + \text{Closing fixed assets}}{2}$$

Greater the fixed assets turnover ratio better is the efficiency of management in utilisation of fixed assets.

### Tutorial note

In the absence of opening fixed assets, closing fixed assets can be taken instead of average fixed assets.



Fixed assets turnover ratio can also be calculated by substituting cost of revenue from operations instead of revenue from operations.

### Illustration 11

From the following information of Ashika Ltd., calculate fixed assets turnover ratio:

- (i) Revenue from operations during the year were ₹ 60,00,000.
- (ii) Fixed assets at the end of the year was ₹ 6,00,000.

### Solution

$$\text{Fixed assets turnover ratio} = \frac{\text{Revenue from operations}}{\text{Average fixed assets}} = \frac{60,00,000}{6,00,000} = 10 \text{ times}$$

### Tutorial note

As opening fixed assets are not given, fixed assets at the end are taken instead of average fixed assets.

### Illustration 12

Calculate (i) Inventory turnover ratio (ii) Trade receivable turnover ratio (iii) Trade payable turnover ratio and (iv) Fixed assets turnover ratio from the following information obtained from Delphi Ltd.

Particulars	As on 31st March, 2018 ₹	As on 31st March, 2019 ₹
Inventory	1,40,000	1,00,000
Trade receivables	80,000	60,000
Trade payables	40,000	50,000
Fixed assets	5,50,000	5,00,000

Additional information:

- (i) Revenue from operations for the year ₹ 10,50,000
- (ii) Purchases for the year ₹ 4,50,000
- (iii) Cost of revenue from operations ₹ 6,00,000.

Assume that sales and purchases are for credit.

#### Solution

$$(i) \text{ Inventory turnover ratio} = \frac{\text{Cost of revenue from operations}}{\text{Average inventory}} = \frac{6,00,000}{1,20,000} = 5 \text{ times}$$

$$\begin{aligned} \text{Average inventory} &= \frac{\text{Opening inventory} + \text{Closing inventory}}{2} \\ &= \frac{1,40,000 + 1,00,000}{2} = \frac{2,40,000}{2} = ₹ 1,20,000 \end{aligned}$$

$$(ii) \text{ Trade receivables turnover ratio} = \frac{\text{Credit revenue from operations}}{\text{Average trade receivables}}$$
$$= \frac{10,50,000}{70,000} = 15 \text{ times}$$

$$\begin{aligned} \text{Average trade receivables} &= \frac{\text{Opening trade receivables} + \text{Closing trade receivables}}{2} \\ &= \frac{80,000 + 60,000}{2} = \frac{1,40,000}{2} = ₹ 70,000 \end{aligned}$$

$$(iii) \text{ Trade payables turnover ratio} = \frac{\text{Net credit purchases}}{\text{Average trade payables}} = \frac{4,50,000}{45,000} = 10 \text{ times}$$

$$\text{Average trade payables} = \frac{\text{Opening trade payables} + \text{Closing trade payables}}{2}$$

$$= \frac{40,000 + 50,000}{2} = \frac{90,000}{2} = ₹ 45,000$$

$$\text{(iv) Fixed assets turnover ratio} = \frac{\text{Revenue from operations}}{\text{Average fixed assets}} = \frac{10,50,000}{5,25,000} = 2 \text{ times}$$

$$\text{Average fixed assets} = \frac{\text{Opening fixed assets} + \text{Closing fixed assets}}{2}$$

$$= \frac{5,50,000 + 5,00,000}{2} = \frac{10,50,000}{2} = ₹ 5,25,000$$

#### 9.6.4. Profitability ratios

Profitability ratios help to assess the profitability of a business concern. These ratios also help to analyse the earning capacity of the business in terms of utilisation of resources employed in the business. Generally these ratios are expressed as a percentage.

The profitability ratios commonly used are

- (i) Gross profit ratio
- (ii) Operating cost ratio
- (iii) Operating profit ratio
- (iv) Net profit ratio
- (v) Return on investment

##### (i) Gross profit ratio

Gross profit ratio is the proportion of gross profit to net revenue from operations. Gross profit ratio shows the margin of profit available out of revenue from operations. It is computed as below:

$$\text{Gross profit ratio} = \frac{\text{Gross profit}}{\text{Revenue from operations}} \times 100$$

Gross profit = Revenue from operations – Cost of revenue from operations

A higher gross profit ratio indicates high profitability. It should be sufficiently high to provide for indirect expenses to be paid by a business.

#### Illustration 13

Calculate gross profit ratio from the following:

Revenue from operations ₹ 1,00,000, Cost of revenue from operations ₹ 80,000 and purchases ₹ 62,500.

## Solution

$$\begin{aligned}\text{Gross profit ratio} &= \frac{\text{Gross profit}}{\text{Revenue from operations}} \times 100 \\ &= \frac{20,000}{1,00,000} \times 100 = 20\%\end{aligned}$$

$$\begin{aligned}\text{Gross profit} &= \text{Revenue from operations} - \text{Cost of revenue from operations} \\ &= 1,00,000 - 80,000 = ₹ 20,000\end{aligned}$$

### (ii) Operating cost ratio

Operating cost ratio is the proportion of operating cost to revenue from operations. This ratio is a test of the operational efficiency of the business. It is calculated as under.

$$\text{Operating cost ratio} = \frac{\text{Operating cost}}{\text{Revenue from operations}} \times 100$$

Operating cost is the cost which is associated with the operating activities of the business.

Operating cost = Cost of revenue from operations + Operating expenses

Operating expenses = Employee benefit expenses + Depreciation + Other expenses related to office and administration, selling and distribution

A lower operating ratio indicates better profitability. Lesser the operating cost ratio, higher is the margin available for payment of non operating expenses such as interest on loans, loss on sale of fixed assets, etc.

### Illustration 14

Following is the statement of profit and loss of Maria Ltd. for the year ended 31st March, 2018. Calculate the operating cost ratio.

#### Statement of Profit and Loss

Particulars	Note No.	Amount ₹
I. Revenue from operations		8,00,000
II. Other Income		20,000
<b>III. Total revenue (I +II)</b>		<b>8,20,000</b>
IV. Expenses:		
Purchases of stock-in-trade		4,50,000
Changes in inventories		-40,000
Employee benefits expenses	1	22,000
Other expenses	2	68,000
Total expenses		5,00,000
<b>V. Profit before tax (III-IV)</b>		<b>3,20,000</b>

## Notes to Accounts

Particulars	Amount ₹
<b>1. Employee benefits expenses</b>	
Wages (direct)	10,000
Salaries	12,000
Total	22,000
<b>2. Other expenses</b>	
Administrative expenses	20,000
Selling and distribution expenses	28,000
Loss on sale of fixed asset	20,000
Total	68,000

### Solution

$$\text{Operating cost ratio} = \frac{\text{Operating cost}}{\text{Revenue from operations}} \times 100 = \frac{4,80,000}{8,00,000} \times 100 = 60\%$$

$$\begin{aligned} \text{Cost of revenue from operations} &= \text{Purchases of stock-in-trade} + \text{Change in inventories of} \\ &\quad \text{stock in trade} + \text{Direct expenses (wages)} \\ &= 4,50,000 + (40,000) + 10,000 = ₹ 4,20,000 \end{aligned}$$

$$\begin{aligned} \text{Operating expenses} &= \text{Administrative expenses} + \text{Selling and distribution expenses} \\ &\quad + \text{Employee benefits expenses (salaries)} \\ &= 20,000 + 28,000 + 12,000 = ₹ 60,000 \end{aligned}$$

$$\begin{aligned} \text{Operating cost} &= \text{Cost of revenue from operations} + \text{Operating expenses} \\ &= 4,20,000 + 60,000 = ₹ 4,80,000 \end{aligned}$$

### Tutorial Note

Loss on sale of fixed assets is a non-operating item, hence it is ignored.

### (iii) Operating profit ratio

Operating profit ratio gives the proportion of operating profit to revenue from operations. Operating profit ratio is an indicator of operational efficiency of an organisation. It may be computed as follows:

$$\text{Operating profit ratio} = \frac{\text{Operating profit}}{\text{Revenue from operations}} \times 100$$

Alternatively, it is calculated as under.

$$\text{Operating profit ratio} = 100 - \text{Operating cost ratio}$$

$$\text{Operating profit} = \text{Revenue from operations} - \text{Operating cost}$$

A higher ratio indicates better profitability. Greater the operating ratio, higher is the margin available for paying non-operating expenses.



### Tutorial note

Operating cost ratio + Operating profit ratio = 100%

### Illustration 15

Calculate operating profit ratio under the following cases.

Case 1: Revenue from operations ₹ 10,00,000, Operating profit ₹ 1,50,000.

Case 2: Revenue from operations ₹ 15,00,000, Operating cost ₹ 12,00,000.

Case 3: Revenue from operations ₹ 20,00,000, Gross profit 30% on revenue from operations, Operating expenses ₹ 4,00,000

### Solution

$$\begin{aligned}\text{Case 1: Operating profit ratio} &= \frac{\text{Operating profit}}{\text{Revenue from operations}} \times 100 \\ &= \frac{1,50,000}{10,00,000} \times 100 = 15\%\end{aligned}$$

$$\begin{aligned}\text{Case 2: Operating profit ratio} &= \frac{\text{Operating profit}}{\text{Revenue from operations}} \times 100 \\ &= \frac{3,00,000}{15,00,000} \times 100 = 20\%\end{aligned}$$

$$\begin{aligned}\text{Operating profit} &= \text{Revenue from operations} - \text{Operating Cost} \\ &= 15,00,000 - 12,00,000 = ₹ 3,00,000\end{aligned}$$

$$\begin{aligned}\text{Case 3: Operating profit ratio} &= \frac{\text{Operating profit}}{\text{Revenue from operations}} \times 100 \\ &= \frac{2,00,000}{20,00,000} \times 100 = 10\%\end{aligned}$$

$$\text{Gross profit} = 20,00,000 \times \frac{30}{100} = ₹ 6,00,000$$

$$\text{Operating profit} = \text{Gross profit} - \text{Operating expenses}$$

$$\text{Operating profit} = 6,00,000 - 4,00,000 = ₹ 2,00,000$$

### (iv) Net profit ratio

Net profit ratio is the percentage of net profit on revenue from operations. It is calculated as under:

$$\text{Net profit ratio} = \frac{\text{Net profit after tax}}{\text{Revenue from operations}} \times 100$$

Net profit after tax = Gross profit + Indirect income – Indirect expenses – Tax

(OR)

Net profit after tax = Revenue from operations – Cost of revenue from operations – Operating expenses – Non operating expenses + Non-operating income - Tax

Net profit ratio is an indicator of the overall profitability of the business. A higher net profit ratio indicates high profitability.

### Illustration 16

From the following details of a business concern calculate net profit ratio.

Particulars	₹
Revenue from operations	3,50,000
Cost of revenue from operations	1,50,000
Administration expenses	50,000
Selling expenses	10,000

### Solution

$$\text{Net profit ratio} = \frac{\text{Net profit after tax}}{\text{Revenue from operations}} \times 100 = \frac{1,40,000}{3,50,000} \times 100 = 40\%$$

$$\begin{aligned} \text{Net profit} &= \text{Revenue from operations} - \text{Cost of revenue from operations} - \text{Administration} \\ &\quad \text{expenses} - \text{Selling expenses} \\ &= 3,50,000 - 1,50,000 - 50,000 - 10,000 = ₹ 1,40,000 \end{aligned}$$

### Tutorial note

It is assumed that there is no tax payable.

### Illustration 17

From the following statement of profit and loss of Mukesh Ltd. calculate

- (i) Gross profit ratio      (ii) Net profit ratio.

#### Statement of Profit and Loss

Particulars	Amount ₹
I. Revenue from operations	5,00,000
II. Other income:	
Income from investment	40,000
<b>III. Total revenues (I+II)</b>	<b>5,40,000</b>
IV. Expenses:	
Purchase of stock in trade	1,80,000
Changes in inventories	20,000
Employee benefits expense	30,000
Other expenses	1,10,000
Provision for tax	50,000
Total expenses	3,90,000
<b>V. Profit for the year</b>	<b>1,50,000</b>

### Solution

$$(i) \text{ Gross profit ratio} = \frac{\text{Gross profit}}{\text{Revenue from operations}} \times 100 = \frac{3,00,000}{5,00,000} \times 100 = 60\%$$

$$\begin{aligned} \text{Gross profit} &= \text{Revenue from operations} - \text{Cost of revenue from operations} \\ &= 5,00,000 - 2,00,000 = ₹ 3,00,000 \end{aligned}$$

$$\begin{aligned} \text{Cost of revenue from operations} &= \text{Purchase of stock in trade} + \text{Changes in inventories} \\ &= 1,80,000 + 20,000 = ₹ 2,00,000 \end{aligned}$$

$$(ii) \text{ Net profit ratio} = \frac{\text{Net profit after tax}}{\text{Revenue from operations}} \times 100 = \frac{1,50,000}{5,00,000} \times 100 = 30\%$$

### Illustration 18

From the following trading activities of Naveen Ltd. calculate

(i) Gross profit ratio (ii) Net profit ratio (iii) Operating cost ratio (iv) Operating profit ratio

#### Statement of Profit and loss

Particulars	₹
I. Revenue from operations	20,000
II. Other income:	
Income from investments	200
<b>III. Total revenues (I+II)</b>	<b>20,200</b>
IV. Expenses:	
Purchases of stock-in-trade	17,000
Changes in inventories	-1,000
Finance costs	300
Other expenses (administration and selling)	2,400
<b>Total expenses</b>	<b>18,700</b>
<b>V. Profit before tax (III - IV)</b>	<b>1,500</b>

### Solution

$$(i) \text{ Gross profit ratio} = \frac{\text{Gross profit}}{\text{Revenue from operations}} \times 100 = \frac{4,000}{20,000} \times 100 = 20\%$$

$$\begin{aligned} \text{Cost of revenue from operations} &= \text{Purchase of stock-in-trade} + \text{Changes in inventory} \\ &\quad + \text{Direct expenses} \\ &= 17,000 - 1,000 + 0 = ₹ 16,000 \end{aligned}$$

$$\begin{aligned} \text{Gross profit} &= \text{Revenue from operations} - \text{Cost of revenue from operations} \\ &= 20,000 - 16,000 = ₹ 4,000 \end{aligned}$$

$$(ii) \text{ Net profit ratio} = \frac{\text{Net profit after tax}}{\text{Revenue from operations}} \times 100 = \frac{1,500}{20,000} \times 100 = 7.5\%$$

### Tutorial note

It is assumed that there is no tax payable.

$$(iii) \text{ Operating cost ratio} = \frac{\text{Operating cost}}{\text{Revenue from operations}} \times 100 = \frac{18,400}{20,000} \times 100 = 92\%$$

Operating cost = Cost of revenue from operations + Operating expenses  
 Operating expenses = Other expenses = ₹ 2,400  
 Operating cost = 16,000 + 2,400 = ₹ 18,400

$$(iv) \text{ Operating profit ratio} = \frac{\text{Operating profit}}{\text{Revenue from operations}} \times 100 = \frac{1,600}{20,000} \times 100 = 8\%$$

Operating profit = Revenue from operations – Operating cost  
 = 20,000 – 18,400 = ₹ 1,600

### (v) Return on Investment (ROI)

Return on investment shows the proportion of net profit before interest and tax to capital employed (shareholders' funds and long term debts). This ratio measures how efficiently the capital employed is used in the business. It is an overall measure of profitability of a business concern. It is computed as below:

$$\text{Return on Investment (ROI)} = \frac{\text{Net profit before interest and tax}}{\text{Capital employed}} \times 100$$

Capital employed = Shareholders' funds + Non current liabilities

Greater the return on investment better is the profitability of a business and vice versa.

### Illustration 19

Following is the extract of the balance sheet of Babu Ltd., as on 31st March, 2018:

Particulars	Amount ₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	70,000
(b) Reserves and surplus	25,000
<b>2. Non-current liabilities</b>	
Long-term borrowings	30,000
<b>3. Current liabilities</b>	
(a) Trade payables	20,000
(b) Other current liabilities	15,000
(c) Short-term provisions	42,000
<b>Total</b>	<b>2,02,000</b>

Net profit before interest and tax for the year was ₹ 25,000. Calculate the return on capital employed for the year.

## Solution

$$\begin{aligned}\text{Return on Investment} &= \frac{\text{Net profit before interest and tax}}{\text{Capital employed}} \times 100 \\ &= \frac{25,000}{1,25,000} \times 100 = 20\%\end{aligned}$$

$$\begin{aligned}\text{Capital employed} &= \text{Share capital} + \text{Reserves and surplus} + \text{Long term borrowings} \\ &= 70,000 + 25,000 + 30,000 = ₹ 1,25,000\end{aligned}$$



### Student activity 9.3

Whole class activity: Discuss the possible causes and consequences for the following situations:

- A departmental store's net profit margin has decreased compared to last year's margin.
- A trader has been allowed 30 days to pay to his suppliers, but he takes 45 days.
- Debt collection period has been increasing.

## 9.7. Advantages of ratio analysis

Following are the advantages of ratio analysis:

- (i) Measuring operational efficiency:** Ratio analysis helps to know operational efficiency of a business by finding the relationship between operating cost and revenues and also by comparison of present ratios with those of the past ratios.
- (ii) Measuring financial solvency:** Ratio analysis helps to ascertain the liquidity or short term solvency and long term solvency of a business concern.
- (iii) Facilitating investment decisions:** Ratio analysis helps the management in making effective decisions regarding profitable avenues of investment.
- (iv) Analysing the profitability:** Ratio analysis helps to analyse the profitability of a business in terms of sales and investments.
- (v) Intra firm comparison:** Comparison of efficiency of different divisions of an organisation is possible by comparing the relevant ratios.
- (vi) Inter firm comparison:** Ratio analysis helps the firm to compare its performance with other firms.

## 9.8. Limitations of ratio analysis

Following are the limitations of ratio analysis:

- (i) Ratios are only means:** Ratios are not end in themselves but they are only means to achieve a particular purpose. Analysis of related items must be done by the management or experts with the help of ratios.

- (ii) **Accuracy of financial information:** The accuracy of a ratio depends on the accuracy of information taken from financial statements. If the statements are inaccurate, ratios computed based on that will also be inaccurate.
- (iii) **Consistency in preparation of financial statements:** Inter firm comparisons with the help of ratio analysis will be meaningful only if the firms follow uniform accounting procedures consistently.
- (iv) **Non-availability of standards or norms:** Ratios will be meaningful only if they are compared with accepted standards or norms. Only few financial ratios have universally recognised standards. For other ratios, comparison with standards is not possible.
- (v) **Change in price level:** Ratio analysis may not reflect price level changes and current values as they are calculated based on historical data given in financial statements.

### Points to remember

- ❖ An accounting ratio is a mathematical expression of the relationship between two items or group of items shown in the financial statements.
- ❖ Under the functional classification, the ratios are classified as liquidity ratios, solvency ratios, profitability ratios and turnover ratios.
- ❖ Liquidity ratios help to assess the ability of a business concern to meet its short term financial obligations.
- ❖ Long term solvency ratios help to determine the ability of the business to repay its debts in the long run.
- ❖ Profitability ratios are calculated to analyse the earning capacity of the business and is generally expressed as a percentage.
- ❖ Turnover ratios show how efficiently assets or other items have been used to generate revenue from operations.

### Self-examination questions

#### I Multiple choice questions

##### Choose the correct answer

1. The mathematical expression that provides a measure of the relationship between two figures is called
 

(a) Conclusion	(b) Ratio	(c) Model	(d) Decision
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2. Current ratio indicates
 

(a) Ability to meet short term obligations	(b) Efficiency of management
(c) Profitability	(d) Long term solvency
3. Current assets excluding inventory and prepaid expenses is called
 

(a) Reserves	(b) Tangible assets	(c) Funds	(d) Quick assets
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4. Debt equity ratio is a measure of

- (a) Short term solvency (b) Long term solvency  
(c) Profitability (d) Efficiency

5. Match List I with List II and select the correct answer using the codes given below:

List I	List II
(i) Current ratio	1. Liquidity
(ii) Net profit ratio	2. Efficiency
(iii) Debt-equity ratio	3. Long term solvency
(iv) Inventory turnover ratio	4. Profitability

Codes:

	(i)	(ii)	(iii)	(iv)
(a)	1	4	3	2
(b)	3	2	4	1
(c)	4	3	2	1
(d)	1	2	3	4

6. To test the liquidity of a concern, which of the following ratios are useful?

- (i) Quick ratio  
(ii) Net profit ratio  
(iii) Debt-equity ratio  
(iv) Current ratio

Select the correct answer using the codes given below:

- (a) (i) and (ii) (b) (i) and (iv) (c) (ii) and (iii) (d) (ii) and (iv)

7. Proportion of share holders' funds to total assets is called

- (a) Proprietary ratio (b) Capital gearing ratio  
(c) Debt equity ratio (d) Current ratio

8. Which one of the following is not correctly matched?

- (a) Liquid ratio – Proportion  
(b) Gross profit ratio – Percentage  
(c) Fixed assets turnover ratio – Percentage  
(d) Debt-equity ratio – Proportion

9. Current liabilities ₹ 40,000; Current assets ₹ 1,00,000 ; Inventory ₹ 20,000 . Quick ratio is

- (a) 1:1 (b) 2.5:1 (c) 2:1 (d) 1:2

10. Cost of revenue from operations ₹ 3,00,000; Inventory in the beginning of the year ₹ 60,000; Inventory at the close of the year ₹ 40,000. Inventory turnover ratio is

- (a) 2 times (b) 3 times (c) 6 times (d) 8 times

Answers: 

1. (b)	2. (a)	3. (d)	4. (b)	5. (a)	6. (b)	7.(a)	8. (c)	9. (c)	10.(c)
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## II Very short answer questions

1. What is meant by accounting ratios?
2. What is quick ratio?

3. What is meant by debt equity ratio?
4. What does return on investment ratio indicate?
5. State any two limitations of ratio analysis.

### III Short answer questions

1. Explain the objectives of ratio analysis.
2. What is inventory conversion period? How is it calculated?
3. How is operating profit ascertained?
4. State any three advantages of ratio analysis.
5. Bring out the limitations of ratio analysis.

### IV Exercises

#### Liquidity ratios

1. Calculate the current ratio from the following information.

Particulars	₹	Particulars	₹
Current investments	40,000	Fixed assets	5,00,000
Inventories	2,00,000	Trade creditors	80,000
Trade debtors	1,20,000	Bills payable	50,000
Bills receivable	80,000	Expenses payable	20,000
Cash and cash equivalents	10,000	Non-current liability	3,00,000

(Answer: Current ratio: 3:1)

2. Calculate quick ratio: Total current liabilities ₹ 2,40,000; Total current assets ₹ 4,50,000; Inventories ₹ 70,000; Prepaid expenses ₹ 20,000

(Answer: Quick ratio: 1.5:1)

3. Following is the balance sheet of Lakshmi Ltd. as on 31st March, 2019:

Particulars	₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
Equity share capital	4,00,000
<b>2. Non-current liabilities</b>	2,00,000
Long term borrowings	
<b>3. Current liabilities</b>	
(a) Short-term borrowings	50,000
(b) Trade payables	3,10,000
(c) Other current liabilities	
Expenses payable	15,000
(d) Short-term provisions	25,000
<b>Total</b>	<b>10,00,000</b>
<b>II ASSETS</b>	
<b>1. Non-current assets</b>	
(a) Fixed assets	4,00,000
Tangible assets	



<b>2. Current assets</b>	
(a) Inventories	1,60,000
(b) Trade debtors	3,20,000
(c) Cash and cash equivalents	80,000
(d) Other current assets	
Prepaid expenses	40,000
<b>Total</b>	<b>10,00,000</b>

Calculate:

(i) Current ratio      (ii) Quick ratio

(Answer: (i) Current ratio: 1.5:1; (ii) Quick ratio: 1:1)

### Long term solvency ratios

4. From the following information calculate debt equity ratio.

#### Balance Sheet (Extract) as on 31st March, 2019

Particulars	Amount ₹
<b>I. EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	
Equity share capital	6,00,000
(b) Reserves and surplus	2,00,000
<b>2. Non-current liabilities</b>	
Long-term borrowings (Debentures)	6,00,000
<b>3. Current liabilities</b>	
(a) Trade payables	1,60,000
(b) Other current liabilities	
Outstanding expenses	40,000
<b>Total</b>	<b>16,00,000</b>

(Answer: Debt equity ratio: 0.75:1)

5. From the following Balance Sheet of Sundaram Ltd. calculate proprietary ratio:

#### Balance sheet of Sundaram Ltd. as on 31.3.2019

Particulars	Amount ₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	
(i) Equity share capital	2,50,000
(ii) Preference share capital	1,50,000
(b) Reserves and surplus	50,000
<b>2. Non-current liabilities</b>	
Long-term borrowings	-
<b>3. Current liabilities</b>	
Trade payables	1,50,000
<b>Total</b>	<b>6,00,000</b>

<b>II ASSETS</b>	
<b>1. Non-current assets</b>	
(a) Fixed assets	4,60,000
(b) Non-current investments	1,00,000
<b>2. Current assets</b>	
Cash and Cash equivalents	40,000
<b>Total</b>	<b>6,00,000</b>

(Answer: Proprietary ratio: 0.75:1)

6. From the following information calculate capital gearing ratio:

**Balance Sheet (Extract) as on 31.03.2018**

Particulars	Amount ₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	
Equity share capital	4,00,000
5% Preference share capital	1,00,000
(b) Reserves and surplus	
General reserve	2,50,000
Surplus	1,50,000
<b>2. Non-current liabilities</b>	
Long-term borrowings (6% Debentures)	3,00,000
<b>3. Current liabilities</b>	
Trade payables	1,20,000
Provision for tax	30,000
<b>Total</b>	<b>13,50,000</b>

(Answer: Capital gearing ratio: 0.5:1)

7. From the following Balance Sheet of James Ltd. as on 31.03.2019 calculate

(i) Debt-equity ratio      (ii) Proprietary ratio      (iii) Capital gearing ratio

**Balance Sheet of James Ltd. as on 31.03.2019**

Particulars	Amount ₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	
Equity share capital	2,50,000
6% Preference share capital	2,00,000
(b) Reserves and surplus	1,50,000
<b>2. Non-current liabilities</b>	
Long-term borrowings (8% Debentures)	3,00,000
<b>3. Current liabilities</b>	
Short-term borrowings from banks	2,00,000
Trade payables	1,00,000
<b>Total</b>	<b>12,00,000</b>

<b>II ASSETS</b>	
<b>1. Non-current assets</b>	
Fixed assets	8,00,000
<b>2. Current assets</b>	
(a) Inventories	1,20,000
(b) Trade receivables	2,65,000
(c) Cash and cash equivalents	10,000
(d) Other current assets	
Expenses paid in advance	5,000
<b>Total</b>	<b>12,00,000</b>

(Answer: (i) Debt-equity ratio: 0.5:1; (ii) Proprietary ratio:0.5:1; (iii) Capital gearing ratio: 1.25:1)

### Turnover ratios

8. From the given information calculate the inventory turnover ratio and inventory conversion period (in months) of Devi Ltd.

Particulars	₹
Revenue from operations	12,00,000
Inventory at the beginning of the year	1,70,000
Inventory at the end of the year	1,30,000
Purchases made during the year	6,90,000
Carriage inwards	20,000

(Answer: Inventory turnover ratio: 5 times; Inventory conversion period: 2.4 months)

9. The credit revenue from operations of Velavan Ltd, amounted to ₹ 10,00,000. Its debtors and bills receivables at the end of the accounting period amounted to ₹ 1,10,000 and ₹ 1,40,000 respectively. Calculate trade receivables turnover ratio and also collection period in months.

(Answer: Trade receivables turnover ratio: 4 times; Debt collection period: 3 months)

10. From the following figures obtained from Arjun Ltd, calculate the trade payables turnover ratio and credit payment period (in days).

Particulars	₹
Credit purchases during 2018 – 2019	9,50,000
Trade creditors as on 1.4.2018	60,000
Trade creditors as on 31.3.2019	50,000
Bills payable as on 1.4.2018	45,000
Bills payable as on 31.3.2019	35,000

(Answer: Trade payables turnover ratio: 10 times; Credit payment period: 36.5 days)

11. From the following information of Geetha Ltd., calculate fixed assets turnover ratio

(i) Revenue from operations during the year were ₹ 55,00,000.

(ii) Fixed assets at the end of the year ₹ 5,00,000.

(Answer: Fixed assets turnover ratio: 11 times)

12. Calculate (i) Inventory turnover ratio (ii) Trade receivables turnover ratio (iii) Trade payables turnover ratio and (iv) Fixed assets turnover ratio from the following information obtained from Aruna Ltd.

Particulars	As on	As on
	31st March, 2018	31st March, 2019
	₹	₹
Inventory	3,60,000	4,40,000
Trade receivables	7,40,000	6,60,000
Trade payables	1,90,000	2,30,000
Fixed assets	6,00,000	8,00,000

Additional information:

(i) Revenue from operations for the year ₹ 35,00,000

(ii) Purchases for the year ₹ 21,00,000

(iii) Cost of revenue from operations ₹ 16,00,000.

Assume that sales and purchases are for credit.

(Answer: (i) Inventory turnover ratio: 4 times; (ii) Trade receivables turnover ratio: 5 times;  
(iii) Trade payables turnover ratio: 10 times; (iv) Fixed assets turnover ratio: 5 times)

### Profitability ratios

13. Calculate gross profit ratio from the following:

Revenue from operations ₹ 2,50,000, Cost of revenue from operations ₹ 2,10,000 and Purchases ₹ 1,80,000.

(Answer: Gross profit ratio 16%)

14. Following is the statement of profit and loss of Padma Ltd. for the year ended 31st March, 2018. Calculate the operating cost ratio.

### Statement of Profit and Loss

Particulars	Note No.	Amount ₹
I. Revenue from operations		15,00,000
II. Other Income		40,000
<b>III. Total revenue (I +II)</b>		<b>15,40,000</b>
IV. Expenses:		
Purchases of Stock-in-trade		8,60,000
Changes in inventories		40,000
Employee benefits expense (Salaries)		1,60,000
Other expenses	1	1,70,000
Total expenses		12,30,000
<b>V. Profit before tax (III-IV)</b>		<b>3,10,000</b>

### Notes to Accounts

Particulars	Amount ₹
1. Other expenses	
Office and administrative expenses	50,000
Selling and distribution expenses	90,000
Loss on sale of furniture	30,000
	1,70,000

(Answer: Operating cost ratio 80%)

15. Calculate operating profit ratio under the following cases.

Case 1: Revenue from operations ₹ 8,00,000, Operating profit ₹ 2,00,000.

Case 2: Revenue from operations ₹ 20,00,000, Operating cost ₹ 14,00,000.

Case 3: Revenue from operations ₹ 10,00,000, Gross profit 25% on revenue from operations, Operating expenses ₹ 1,00,000

(Answer: Operating profit ratio – Case 1: 25%; Case 2: 30%; Case 3: 15%)

16. From the following details of a business concern calculate net profit ratio.

Particulars	₹
Revenue from operations	9,60,000
Cost of revenue from operations	5,50,000
Office and administration expenses	1,45,000
Selling and distribution expenses	25,000

(Answer: Net profit ratio 25%)

17. From the following statement of profit and loss of Dericston Ltd. calculate Gross profit ratio (ii) Net profit ratio.

#### Statement of Profit and Loss

Particulars	₹
I. Revenue from operations	24,00,000
II. Other income:	
Income from investment	70,000
<b>III. Total revenues (I+II)</b>	<b>24,70,000</b>
IV. Expenses:	
Purchase of stock-in-trade	18,80,000
Changes in inventories	- 80,000
Employee benefits expense	2,90,000
Other expenses	1,10,000
Provision for tax	30,000
Total expenses	22,30,000
<b>V. Profit for the year</b>	<b>2,40,000</b>

(Answer: (i) Gross profit ratio 25% (ii) Net profit ratio 10%)

18. From the following trading activities of Rovina Ltd. calculate

(i) Gross profit ratio (ii) Net profit ratio (iii) Operating cost ratio (iv) Operating profit ratio

#### Statement of Profit and loss

Particulars	₹
I. Revenue from operations	4,00,000
II. Other income:	
Income from investments	4,000
<b>III. Total revenues (I+II)</b>	<b>4,04,000</b>
IV Expenses:	
Purchases of stock-in-trade	2,10,000
Changes in inventories	30,000
Finance costs	24,000
Other expenses (Administration and selling)	60,000
Total expenses	3,24,000
<b>V Profit before tax (III - IV)</b>	<b>80,000</b>

(Answer: (i) Gross profit ratio 40% (ii) Net profit ratio 20%  
(iii) Operating cost ratio 75% (iv) Operating profit ratio 25%)

19. Following is the extract of balance sheet of Abdul Ltd., as on 31st March, 2019:

Particulars	₹
<b>I EQUITY AND LIABILITIES</b>	
<b>1. Shareholders' funds</b>	
(a) Share capital	2,00,000
(b) Reserves and surplus	50,000
<b>2. Non-current liabilities</b>	
Long-term borrowings	1,50,000
<b>3. Current liabilities</b>	
(a) Trade payables	1,30,000
(b) Other current liabilities	5,000
(c) Short-term provisions	20,000
<b>Total</b>	<b>5,55,000</b>

Net profit before interest and tax for the year was ₹ 60,000. Calculate the return on capital employed for the year.

(Answer: Return on capital employed: 15%)

#### CASE STUDY

Five friends each have ₹ 50,000 to invest. However, all five have different criteria for their investment decision. Fatima wants a high return on her investment. Thenmozhi wishes to invest in a company which performs well. Nivetha wishes to invest in a company which has good control over expenditure. Supraja is an ethical investor. She is concerned that the company's suppliers get their payment on time. Divya wishes to invest in a company with good liquidity position.

They wanted to compare three different companies' financial statements and calculate ratios. Suggest each one the suitable ratios for their investment decision.

#### To explore further

Calculation of ratios may become difficult when more data are to be used. Is there any solution available for this?

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# UNIT 10

## COMPUTERISED ACCOUNTING SYSTEM- TALLY



### Contents

- 10.1 Introduction
- 10.2. Applications of Computerised Accounting System (CAS)
- 10.3 Automated accounting system
- 10.4 Designing the accounting reports
- 10.5. Data exchange with other information system
- 10.6. Application of computerised accounting system – Tally with GST package
- 10.7. Practical application of accounting software – Tally.ERP 9



### Points to recall

The following points are to be recalled before learning computerised accounting system-Tally:

- ◇ Fundamental principles of accounting
- ◇ Double entry system
- ◇ Basic rules of accounting
- ◇ Computerised Accounting System (CAS)
- ◇ Journalising
- ◇ Subsidiary books
- ◇ Ledger posting
- ◇ Final accounts



### Learning objectives

To enable the students to

- ◇ Understand the automated accounting system
- ◇ Apply Tally.ERP 9 in maintaining books of accounts and generating reports

### Key terms to know

- ◇ Gateway of Tally
- ◇ Accounting groups
- ◇ Accounting features
- ◇ Receipt voucher
- ◇ Payment voucher
- ◇ Contra voucher
- ◇ Purchase voucher
- ◇ Sales voucher
- ◇ Journal voucher



## 10.1 Introduction



### Student activity 10.1

Interview an accountant of a big organisation to know, how far automated accounting system is beneficial for maintaining accounting records.

Computerised accounting system refers to the system of maintaining accounts using computers. It involves the processing of accounting transactions through the use of computer in order to maintain and produce accounting records and reports. Computerised accounting system takes accounting transactions as inputs that are processed through accounting software to generate various reports.

## 10.2. Applications of Computerised Accounting System (CAS)

The applications of CAS are as follows:

1. **Maintaining accounting records:** In CAS, accounting records can be maintained easily and efficiently for long time period. It does not require a large amount of physical space. It facilitates fast and accurate retrieval of data and information.
2. **Inventory management:** CAS facilitates efficient management of inventory. Fast moving, slow moving and obsolete inventory can be identified. Updated information about availability of inventory, level of inventory, etc., can be obtained instantly.
3. **Pay roll preparation:** Pay roll involves the calculation of amount due to an employee. Pay of an employee may be calculated based on hours/days worked or units produced. CAS records the attendance of employees, computes the amount of salary, makes deductions such as provident fund, income tax, etc.
4. **Report generation:** CAS helps to generate various routine and special purpose reports.
5. **Data import/export:** Accounting data and information can be imported from or exported to other users within the organisation as well as outside the organisation.
6. **Taxation:** CAS helps to compute various taxes and to deduct these and deposit the same to the Government account.

## 10.3 Automated accounting system

Automated accounting is an approach to maintain up-to-date accounting records with the aid of accounting software. Under manual accounting system entries are made in different books of accounts while accounting software packages allow manual entry in one field or one place. From that field or place, the software automatically relates the transaction to all other relevant records within the software package.

## 10.4 Designing the accounting reports

Accounting report is a compilation of accounting information that are derived from the accounting records of a business concern. Accounting reports may be classified as routine reports and special purpose reports.



Routine accounting reports include

- (a) Day books / Journal
- (b) Ledger
- (c) Trial balance
- (d) Income statement
- (e) Balance sheet
- (f) Cash flow statement

Special purpose report is a report other than the routine accounting reports which is prepared according to the requirements of the user.

Following are the steps involved in designing accounting reports:

1. Define the objective of generating report
2. Specify the structure of the report
3. Creating database queries to interact with the database to retrieve, modify, add or delete data from the records.

### **10.5. Data exchange with other information system**

A Management Information System (MIS) is a system that provides information for decision making at all levels of management. It includes manufacturing information system, marketing information system, human resource information system and accounting information system. Accounting Information System (AIS) collects financial data, processes them and provides information to the various users. To provide information AIS requires data from other information system that is manufacturing, marketing and human resources. Similarly, other information systems require data from AIS in order to provide information. Thus, data exchange among the information systems is inevitable. For example, to compute amount of wages to be paid, AIS requires data from manufacturing information system and human resource information system.

### **10.6. Application of computerised accounting system – Tally with GST package**

Tally is one of the most widely used financial accounting softwares. It is used by various types of trade and industries. It is a comprehensive business accounting and inventory management software that provides various facilities like multi-lingual operations, online functions, legally supported reports, etc.

In 2009, Tally Solutions introduced the software Tally.ERP 9. The software offers comprehensive business management solution. It maintains all books of accounts. Different types of vouchers such as vouchers for receipt, payment, sales, purchases, etc., can be used for recording transactions. It follows the principle of double entry system of book keeping. In 2017, it was updated to comply with the Indian Goods and Services Tax (GST) requirements.

## 10.7. Practical application of accounting software – Tally.ERP 9

### Practical on application of accounting software - Tally

#### 1. Starting Tally

Tally can be started in either of the ways as given below:

Click on Start > All Programs > Tally.ERP 9 > Tally.ERP 9 icon  
(or)

Click on Tally.ERP 9 icon (shortcut) on the desktop

A newly installed Tally, if opened, will appear as in figure 10.1.

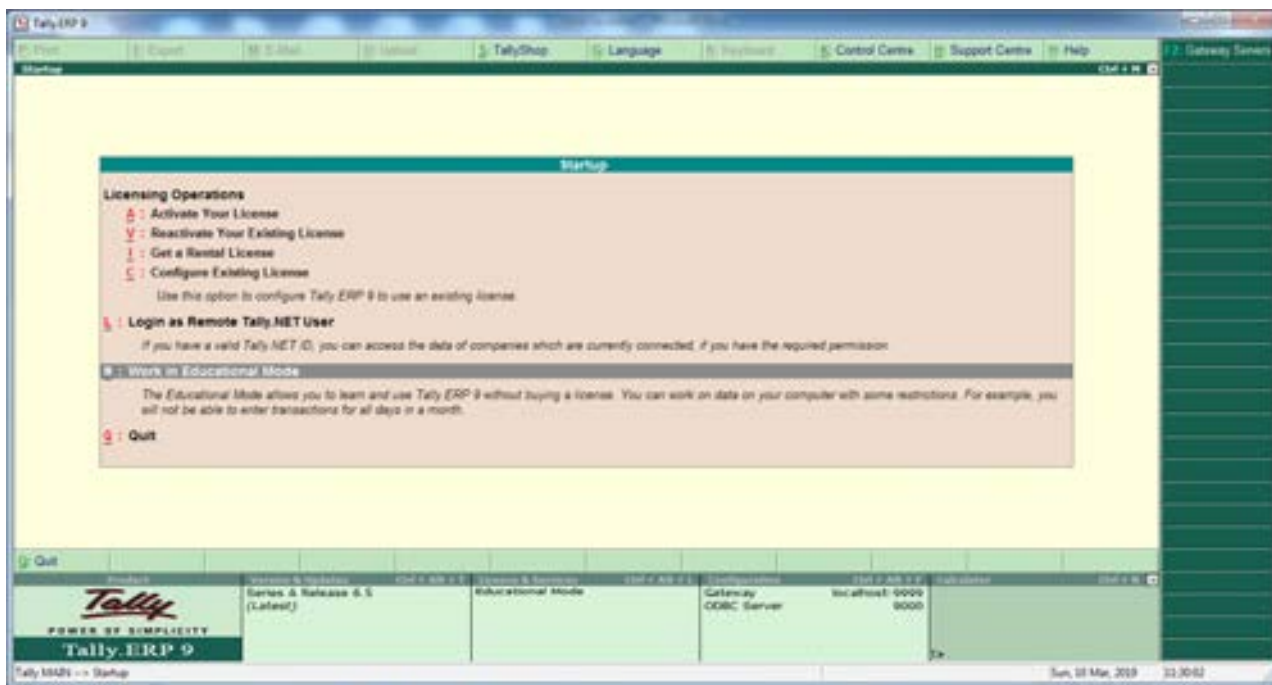


Figure 10.1 Newly installed Tally screen

When Tally is started, choose the mode of operation as per the options listed on the screen. If license is available, choose 'Activate Your License'. Otherwise choose 'Work in Education Mode'.



Tally.ERP 9 can be used without a licence. But, for the date of the transactions only 1, 2 and 31 can be recorded.

For practice, 'Work in Education Mode' is chosen. After the selection, the first screen appears as in figure 10.2.

#### 2. Creation of a company

It is essential to enter the particulars of the company for which accounts are to be maintained in Tally. In order to create a company, the following steps are to be followed:

Company Info > Create Company

After selection of Create Company from first screen in Tally, the Company Creation screen will appear as in figure 10.3.

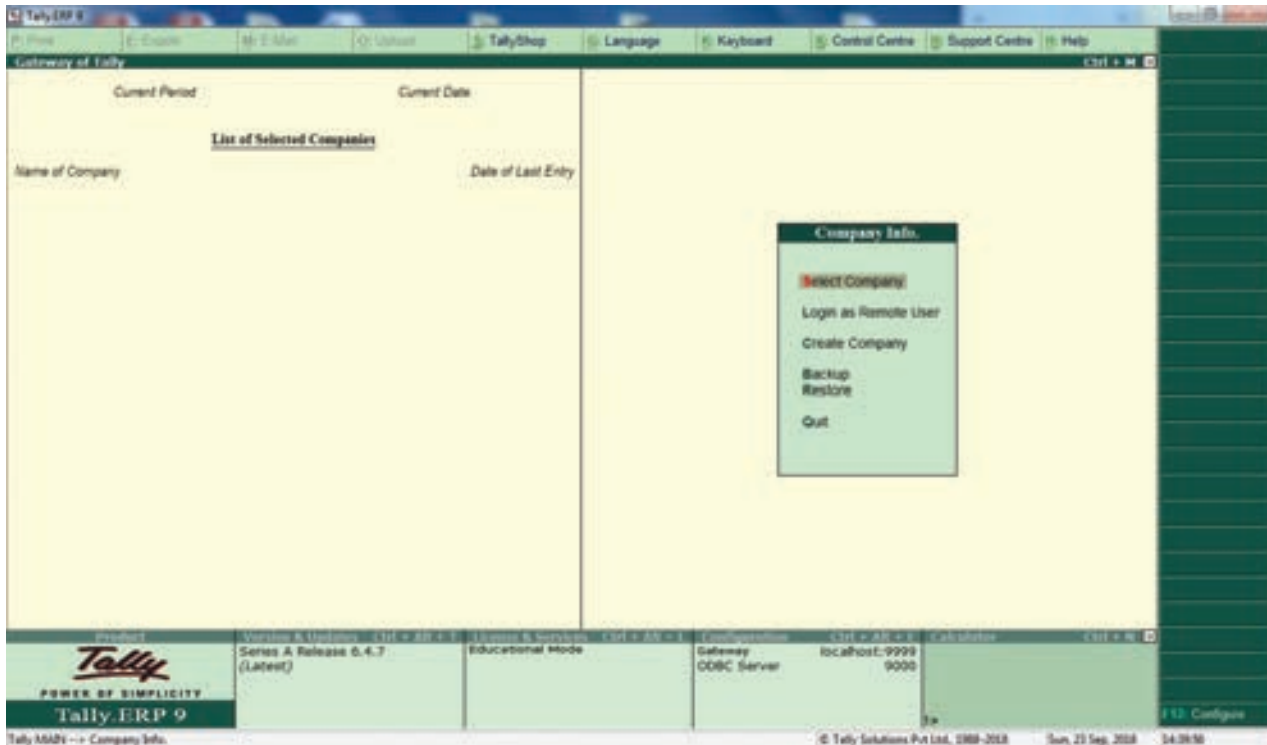


Figure 10.2 First screen in Tally

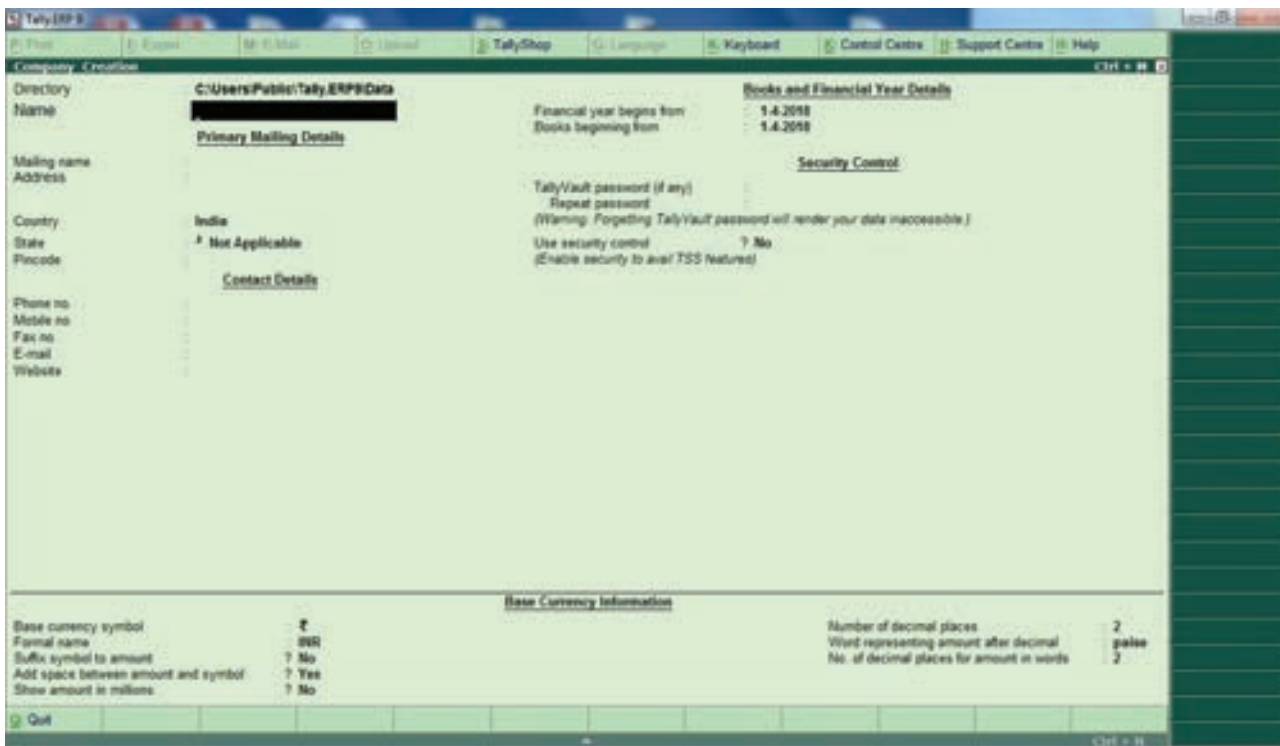


Figure 10.3 Creation of company

Tally asks for name, address, books and financial year details, security control, base currency information, etc. Now, provide all particulars of the company as required in Tally. After completing all entries, choose 'Yes' to accept data and create company.

### Tutorial note

For practice purpose, enter only the name and keep all other fields as they are.

Following the above procedure, multiple companies can be created.

### 3. Gateway of Tally

Tally screen appears as in figure 10.4 given below, after creation of a company and whenever Tally is started. This screen is called Gateway of Tally. It shows the company selected under List of Selected Companies on the left pane.

Gateway of Tally is shown on the right pane which contains menu options such as Transactions and Reports. The shortcut key for each menu option is a letter from the option's name, which will be highlighted in red.

Vertical button bar is placed on the extreme right of the screen which contains buttons such as F1 and F2 for quick interaction with Tally.ERP 9.

Bottom horizontal information panel displays details of product, version, licence, configuration and calculator.

The Gateway of Tally screen will appear as below:

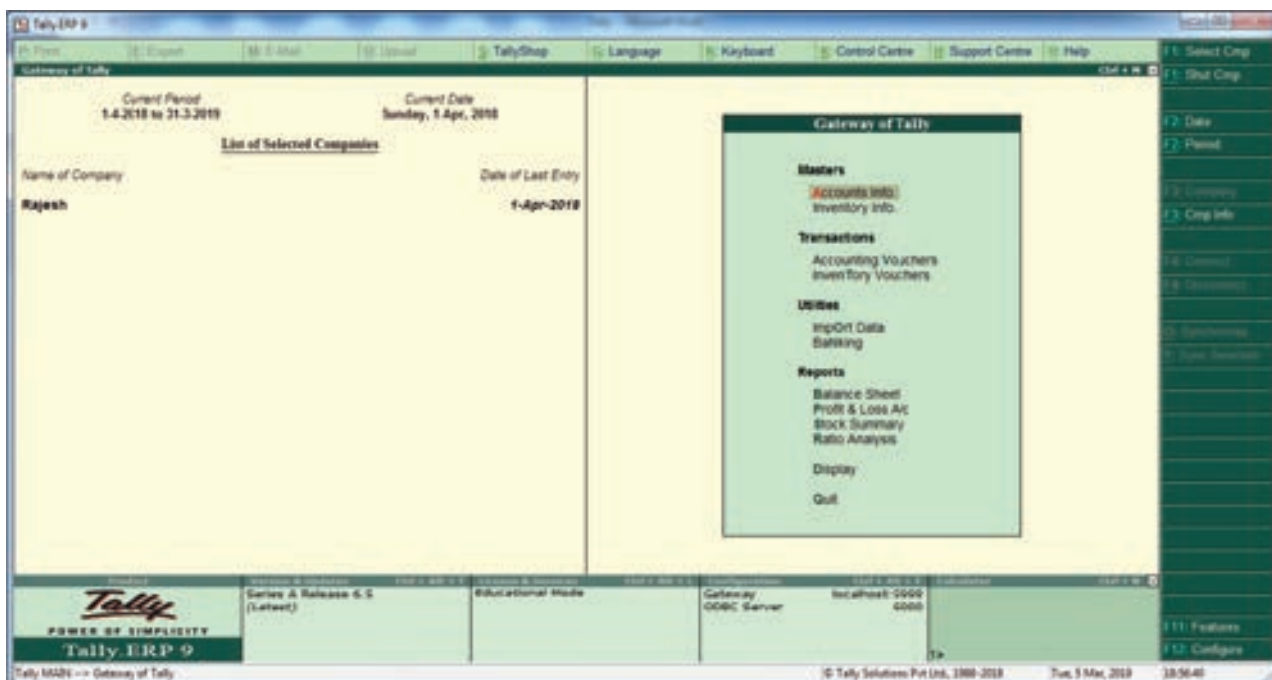


Figure 10.4 Gateway of Tally

### 4. Closing Tally

The following are the two ways for closing Tally:

Press Esc Key > Press Enter or Y or Click on Yes

(or)

Press Ctrl + Q

### 5. Select a company

If multiple companies are created, to choose a particular company, after opening Tally, click F1 (Select Cmp) on the vertical button bar. Tally.ERP 9 displays the Select Company screen, with a list of companies that are already created. Select the company for which accounting has to be done.

## 6. Company features

After creation of a company, it is necessary to set up Tally.ERP 9's features. The features in Tally.ERP 9 are set of capabilities, provided as options, that enable maintenance of financial records as per the requirements of the users. Click F11:Features, on the vertical button bar to go to Company Features menu. It contains Accounting Features, Inventory Features, etc. The Company Features screen will appear as shown in figure 10.5.

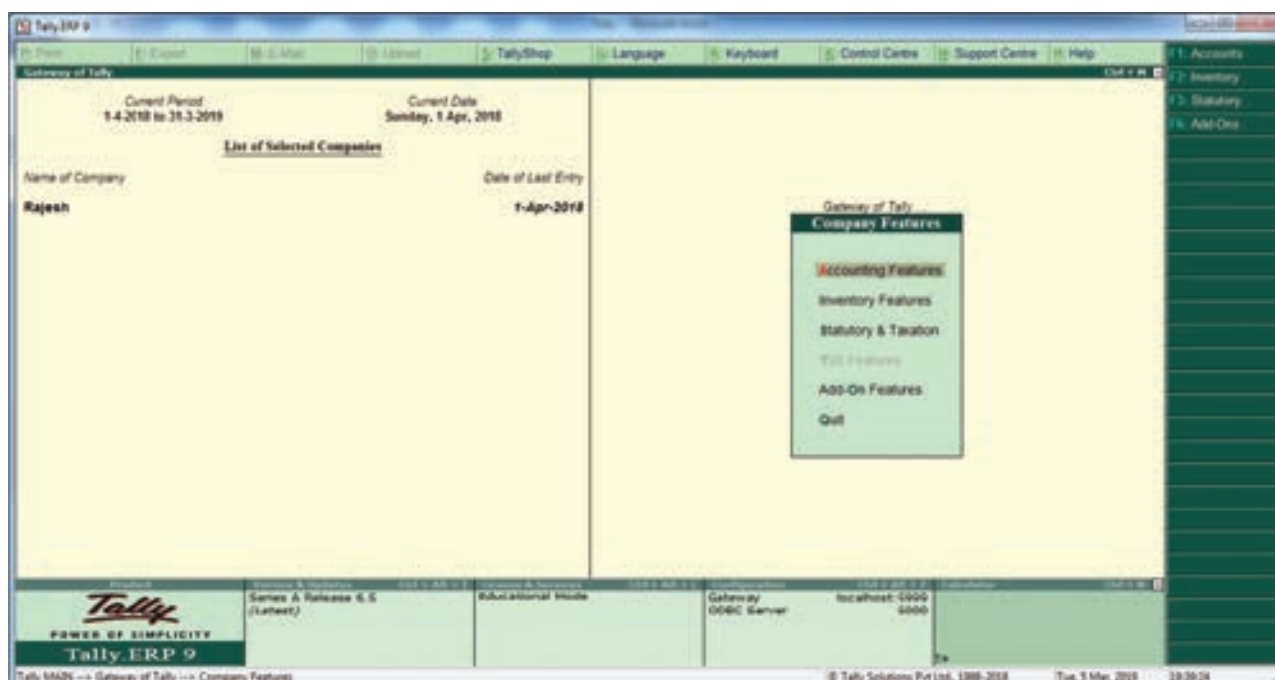


Figure 10.5 Company Features screen

## 7. Accounting Features

The General Accounting Features include 'Maintain accounts only', 'Integrate accounts and inventory' and use Income and Expenses A/c instead of Profit and Loss A/c. The other Accounting Features include Invoicing, Banking Features, etc.

For practice purpose, only the accounting aspects are considered and inventory features are not considered.

Select Accounting Features from the Company Features menu. Under General Accounting Features, set 'Yes' to 'Maintain accounts only' option. Leave all other features to default values and accept 'Yes'.

The Accounting Features screen will appear as shown in figure 10.6. (see the next page)

## 8. Statutory and Taxation features

Statutory and Taxation features include Goods and Services Tax (GST), Value Added Tax (VAT) and Tax Deducted at Source (TDS). To enable Goods and Services Tax, set 'Yes' to 'Enable Goods and Services Tax' option. For practice purpose set to default value of 'No'.

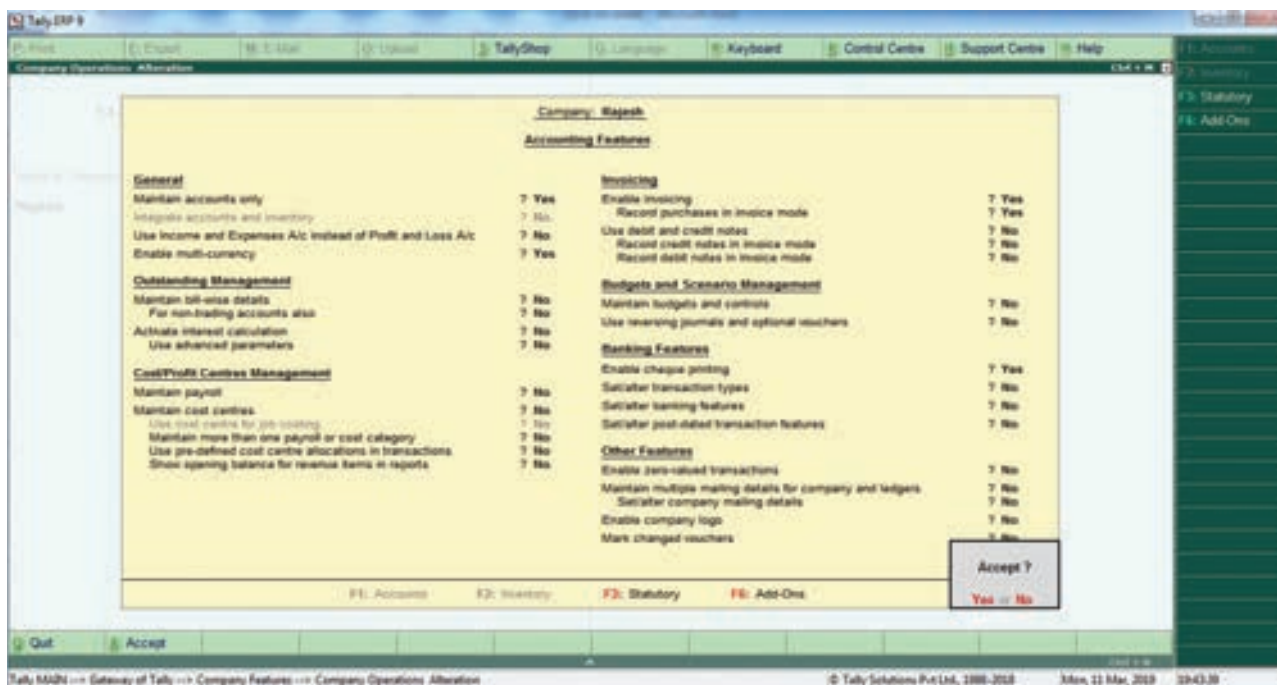


Figure 10.6 Accounting Features screen

## 9. Creating Accounting Groups

In Tally, a Group is a collection of ledgers of the same nature. There are predefined groups of accounts which are widely used in accounts of many organisations. These predefined groups comply with the basic accounting principles of classifying various account heads into Assets, Liabilities, Income and Expense as shown below:

List of Groups		List of Groups	
1	Bank Accounts	18	Indirect Expenses
2	Bank OCC A/c	19	Indirect Incomes
3	Bank OD A/c	20	Investments
4	Branch / Divisions	21	Loans & Advances (Asset)
5	Capital Account	22	Loans (Liability)
6	Cash-in-Hand	23	Misc.Expenses (ASSET)
7	Current Assets	24	Provisions
8	Current Liabilities	25	Purchase Accounts
9	Deposits (Assets)	26	Reserves & Surplus
10	Direct Expenses	27	Retained Earnings
11	Direct Incomes	28	Sales Accounts
12	Duties & Taxes	29	Secured Loans
13	Expenses (Direct)	30	Stock-in-Hand
14	Expenses (Indirect)	31	Sundry Creditors
15	Fixed Assets	32	Sundry Debtors
16	Income (Direct)	33	Suspense A/c
17	Income (Indirect)	34	Unsecured Loans

Groups are categorised as Primary Groups and Sub-Groups. Primary group includes Capital Account, Current Liabilities, Fixed Assets, Current Assets, etc. Sub-Group includes Reserves & Surplus, Sundry Creditors, Sundry Debtors, etc.

To view predefined groups,

Gateway of Tally > Masters > Accounts Info > Groups > Single Group > Display  
After selection, Tally screen will appear as in Figure 10.7.

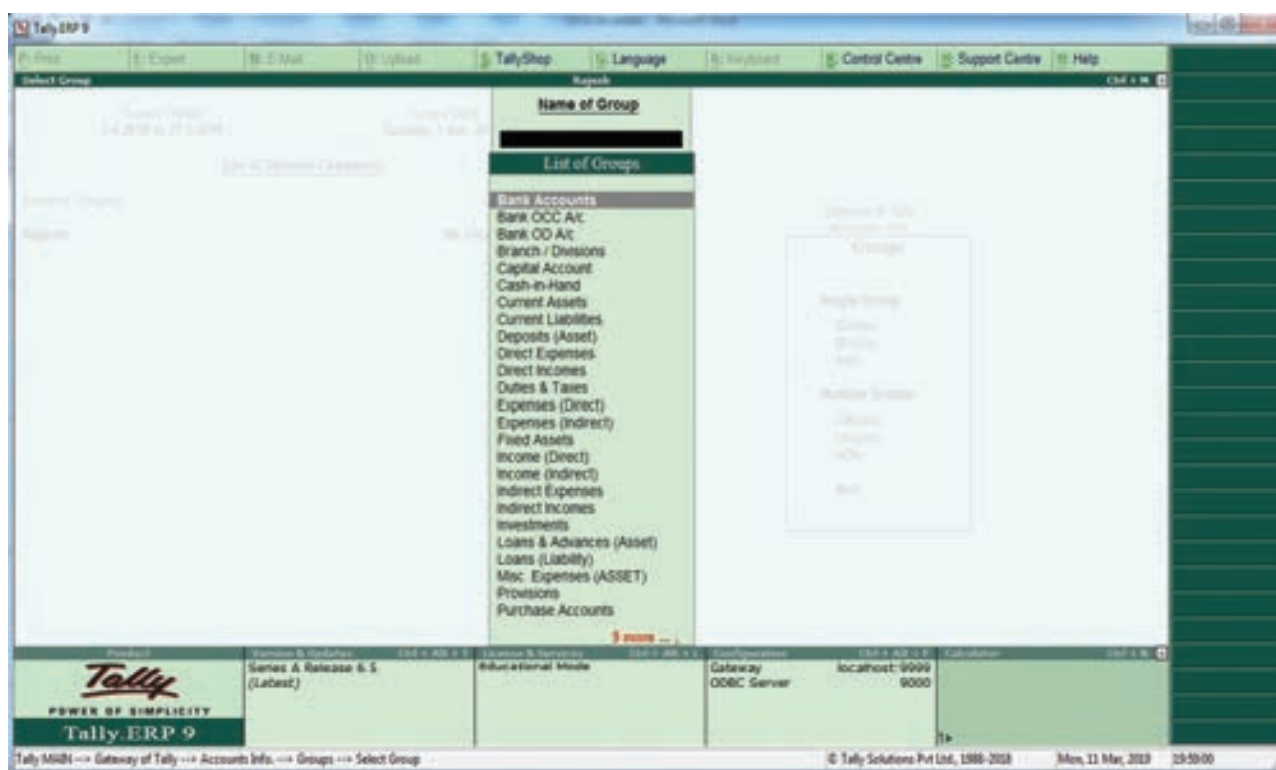


Figure 10.7 List of Groups

If any additional group is required, it can be created as follows:

Gateway of Tally > Masters > Accounts Info > Groups > Single Group > Create

## 10. Ledger Accounts

In Tally, to record transactions, the transactions are to be identified with the related ledger accounts. Tally has two predefined ledgers, Cash and Profit & Loss A/c. The user has to create various other ledgers based on their requirements.

### To create ledger:

Gateway of Tally > Masters > Accounts Info > Ledgers > Single Ledger > Create

After selection, Tally screen will appear as in Figure 10.8.

While creating a ledger, name and the Group under which the ledger account is to be classified should be provided. Leave all other features to default values and accept 'Yes'.

## 11. Modification of group and ledger

Alteration or deletion of group and ledger is possible. While details of user-defined group/ledger can be fully altered, only name can be altered for predefined group/ledger. Predefined group/ledger cannot be deleted. However, user-defined group/ledger can be deleted.

**To delete a ledger:** Gateway of Tally > Masters > Accounts Info > Ledgers > Single Ledger > Alter > Select the Ledger to be deleted > Alt D > Yes

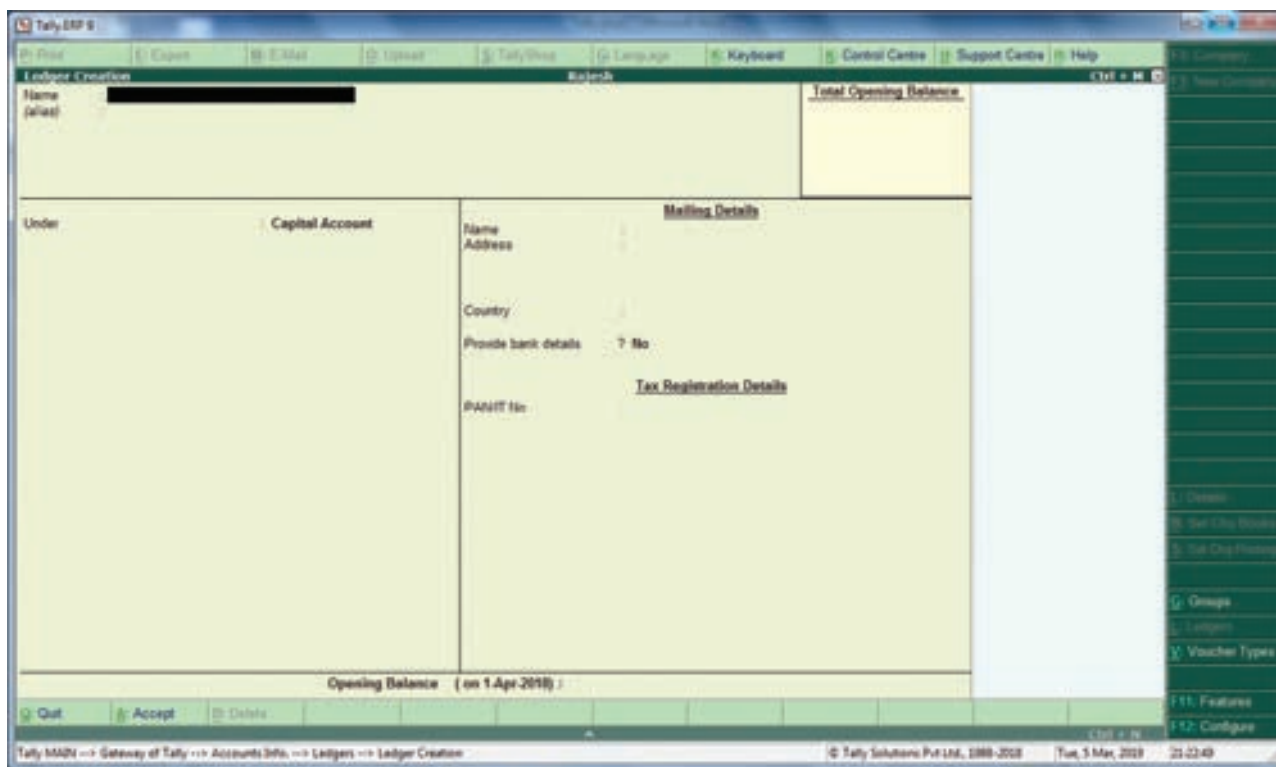


Figure 10.8 Creation of Ledger

## 12. Vouchers

Voucher is a document which contains details of transactions. Transactions are to be recorded through voucher entries. Tally has a set of predefined vouchers such as Purchase, Sales, Payment, Receipt and Contra.

To view the list of voucher types:

Gateway of Tally > Masters > Accounts Info > Voucher Types > Display

As per the requirements of users, additional voucher type can be created.

Following are some of the major accounting vouchers used in an organisation:

- i) Receipt Voucher
- ii) Payment Voucher
- iii) Contra Voucher
- iv) Purchase Voucher
- v) Sales Voucher
- vi) Journal Voucher

### (i) Receipt Voucher

All transactions related to receipt either in cash or through bank are recorded using receipt voucher. In this voucher, cash or bank account is debited and other ledger account is credited.

To record receipt:

Gateway of Tally > Transactions > Accounting Vouchers > F6:Receipt

### (ii) Payment Voucher

All transactions related to payments either in cash or through bank are recorded using payment voucher. In this voucher, cash or bank account is credited and other ledger account is debited.

To record payment:



Gateway of Tally > Transactions > Accounting Vouchers > F5:Payment

**(iii) Contra Voucher**

A transaction involving both cash account and bank account is recorded using contra voucher. The transaction may be for deposit of cash into bank account or withdrawal of cash from bank account.

To record contra:

Gateway of Tally > Transactions > Accounting Vouchers > F4:Contra

**(iv) Purchase Voucher**

Purchase vouchers are used for recording both cash and credit purchases of goods.

To record purchases:

Gateway of Tally > Transactions > Accounting Vouchers > F9:Purchase

**(v) Sales Voucher**

Sales vouchers are used for recording both cash and credit sales of goods.

To record sales:

Gateway of Tally > Transactions > Accounting Vouchers > F8:Sales

**(vi) Journal Voucher**

Journal vouchers are used for recording transactions involving other than cash, bank, purchases and sales such as depreciation, provision for bad debts.

To record journal:

Gateway of Tally > Transactions > Accounting Vouchers > F7:Journal

To record transactions using voucher, Accounting Voucher Creation has to be used. Accounting Voucher Creation contains Name and Number of the voucher, Date of voucher, Particulars, Debit and Credit and Narration.

**Practical problem 1**

Record the following transactions in Tally.

1. Robert commenced a transport business with a capital of ₹ 1,00,000
2. An account was opened with State Bank of India and deposited ₹ 30,000
3. Purchased furniture by paying cash ₹ 10,000
4. Goods purchased on credit from Mohaideen for ₹ 20,000
5. Cash sales made for ₹ 8,000
6. Goods purchased from Rathinam for ₹ 5,000 and money deposited in CDM
7. Goods sold to Rony on credit for ₹ 60,000
8. Money withdrawn from bank for office use ₹ 9,000
9. Part payment of ₹ 10,000 made to Mohaideen by cheque
10. Rony made part payment of ₹ 5,000 by cash
11. Salaries paid to staff through ECS ₹ 6,000
12. Wages of ₹ 3,000 paid by cash
13. Purchased stationery from Pandian Ltd. on credit ₹ 4,000

## Solution

Analysis of transactions, passing journal entries, identification of voucher type and group:

Sl. No.	Particulars	Debit ₹	Credit ₹	Voucher type	Group
1	Cash A/c Dr. To Robert's Capital A/c	1,00,000	1,00,000	Receipt Voucher	Cash-in-Hand Capital Account
2	State Bank of India A/c Dr. To Cash A/c	30,000	30,000	Contra Voucher	Bank Accounts Cash-in-Hand
3	Furniture A/c Dr. To Cash A/c	10,000	10,000	Payment Voucher	Fixed Assets Cash-in-Hand
4	Purchases A/c Dr. To Mohaideen A/c	20,000	20,000	Purchase Voucher	Purchase Accounts Sundry Creditors
5	Cash A/c Dr. To Sales A/c	8,000	8,000	Sales Voucher	Cash-in-Hand Sales Accounts
6	Purchases A/c Dr. To Cash A/c	5,000	5,000	Purchase Voucher	Purchase Accounts Cash-in-Hand
7	Rony A/c Dr. To Sales A/c	60,000	60,000	Sales Voucher	Sundry Debtors Sales Accounts
8	Cash A/c Dr. To Bank A/c	9,000	9,000	Contra Voucher	Cash-in-Hand Bank Accounts
9	Mohaideen A/c Dr. To Bank A/c	10,000	10,000	Payment Voucher	Sundry Creditors Bank Accounts
10	Cash A/c Dr. To Rony A/c	5,000	5,000	Receipt Voucher	Cash-in-Hand Sundry Debtors
11	Salaries A/c Dr. To Bank A/c	6,000	6,000	Payment Voucher	Indirect Expenses Bank Accounts
12	Wages A/c Dr. To Cash A/c	3,000	3,000	Payment Voucher	Direct Expenses Cash-in-Hand
13	Stationery A/c Dr. To Pandian Ltd. A/c	4,000	4,000	Journal Voucher	Indirect Expenses Sundry Creditors

Following steps are to be followed to enter the transactions in Tally.ERP 9

### 1. To create company

Company Info > Create Company

Type the Name as Robert and keep all other fields as they are and choose 'Yes' to accept.



Figure 10.9 Creation of Company

### 2. To maintain accounts only

Gateway of Tally > F11 Accounting Features > General > Maintain accounts only: Yes > Accept Yes

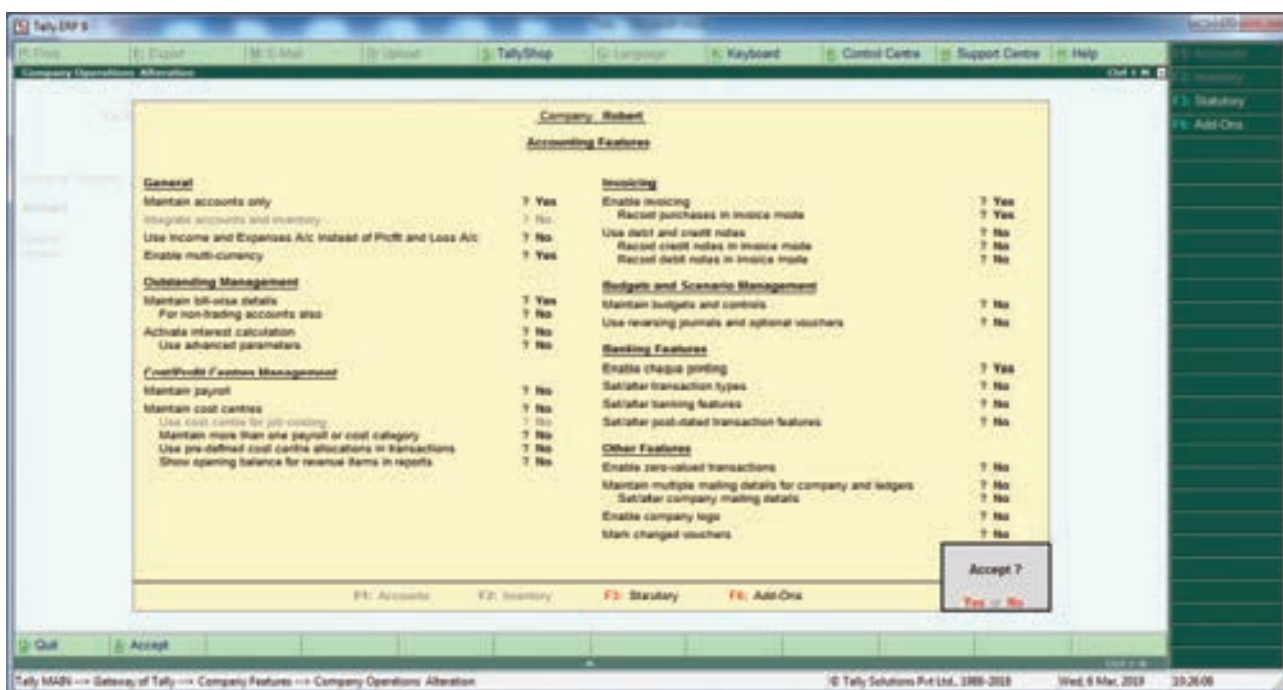


Figure 10.10 Accounting Features

### 3. To create ledger accounts

Gateway of Tally > Masters > Accounts Info > Ledgers > Single Ledger > Create

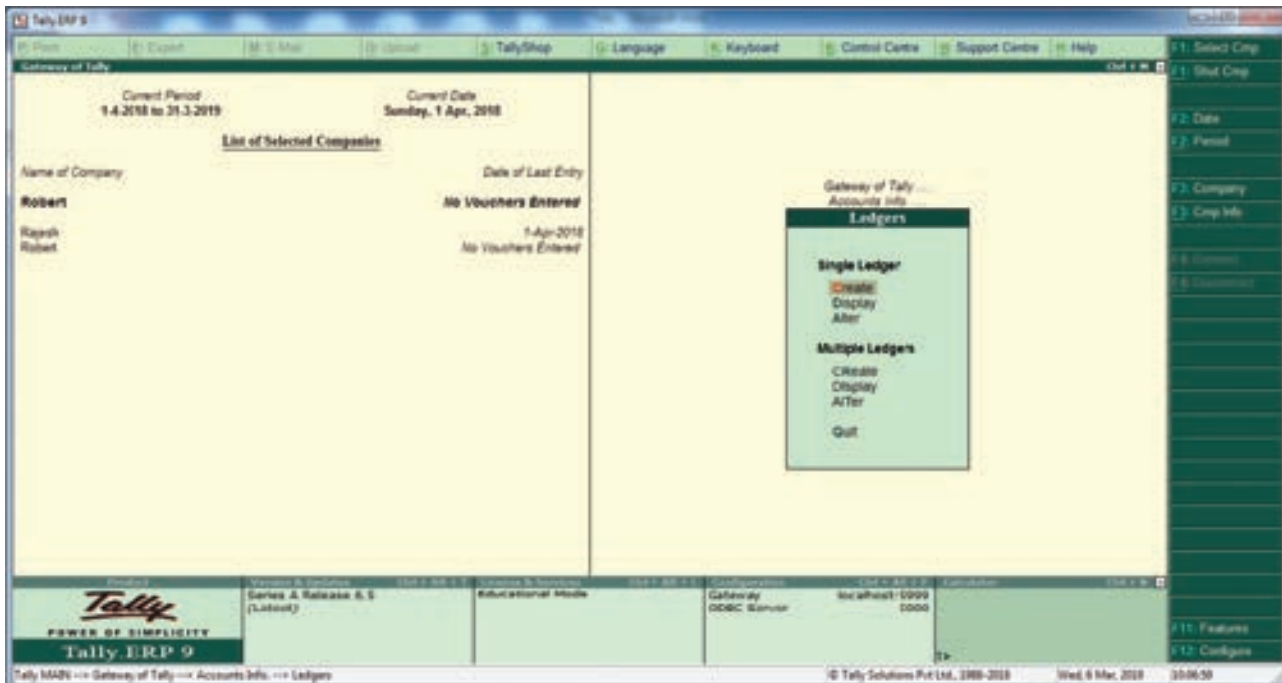


Figure 10.11 Creation of Ledger

- (i) To create Robert's Capital A/c  
 Name: Robert's Capital A/c  
 Under: Capital Account  
 Accept: Yes:

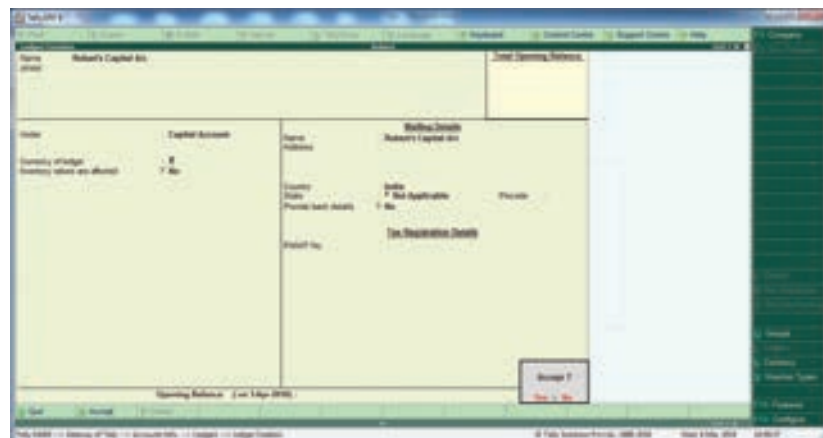


Figure 10.12 Creation of Capital A/c

- (ii) To create State Bank of India A/c  
 Name: State Bank of India A/c  
 Under: Bank Accounts  
 Accept: Yes



Figure 10.13 Creation of State Bank of India A/c

**(iii) To create Furniture A/c**

Name: Furniture A/c

Under: Fixed Assets

Accept: Yes



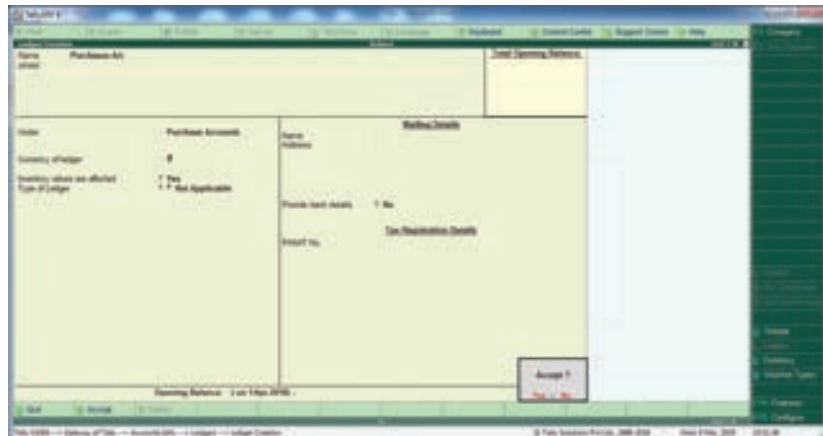
**Figure 10.14 Creation of Furniture A/c**

**(iv) To create Purchases A/c**

Name: Purchases A/c

Under: Purchase

Accept: Yes



**Figure 10.15 Creation of Purchases A/c**

**(v) To create Mohaideen A/c**

Name: Mohaideen A/c

Under: Sundry Creditors

Accept: Yes



**Figure 10.16 Creation of Mohaideen A/c**

**(vi) To create Sales A/c**

Name: Sales A/c

Under: Sales Accounts

Accept: Yes



**Figure 10.17 Creation of Sales A/c**



**(vii) To create Rony A/c**

Name: Rony A/c

Under: Sundry Debtors

Accept: Yes



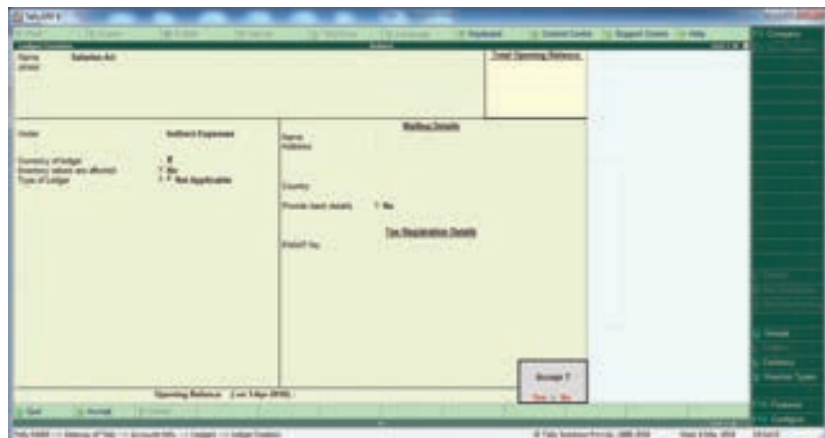
**Figure 10.18 Creation of Rony A/c**

**(viii) To create Salaries A/c**

Name: Salaries A/c

Under: Indirect Expenses

Accept: Yes



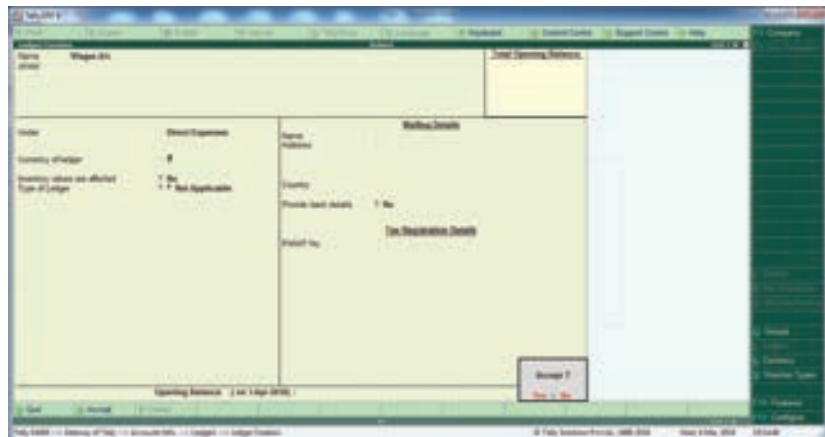
**Figure 10.19 Creation of Salaries A/c**

**(ix) To create Wages A/c**

Name: Wages A/c

Under: Direct Expenses

Accept: Yes



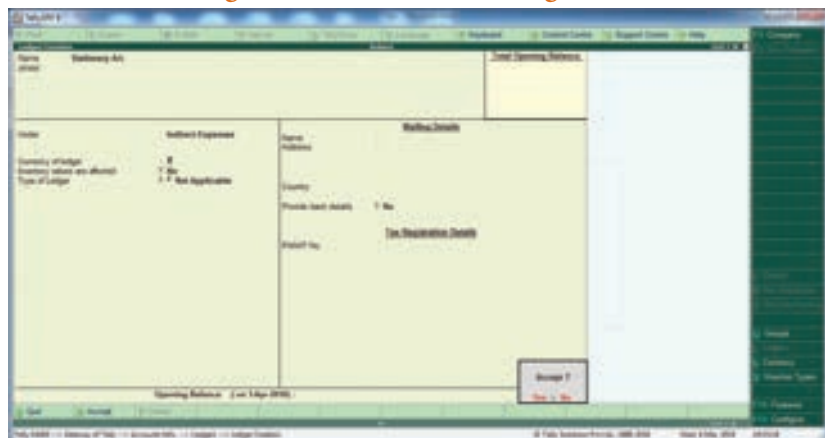
**Figure 10.20 Creation of Wages A/c**

**(x) To create Stationery A/c**

Name: Stationery A/c

Under: Indirect Expenses

Accept: Yes



**Figure 10.21 Creation of Stationery A/c**





**(xi) To create Pandian Ltd. A/c**

Name: Pandian Ltd. A/c

Under:Sundry Creditors

Accept: Yes



Figure 10.22 Creation of Pandian Ltd. A/c

**4. To enter transactions through vouchers**

Gateway of Tally > Transactions > Accounting Vouchers

**(1) Robert commenced a transport business with a capital of ₹ 1,00,000**

F6: Receipt voucher

Account: Cash

Particulars: Robert's Capital A/c  
(Choose from List of Ledger Accounts)

Enter the amount of capital:

₹ 1,00,000

Narration: Capital introduced

Accept Yes.

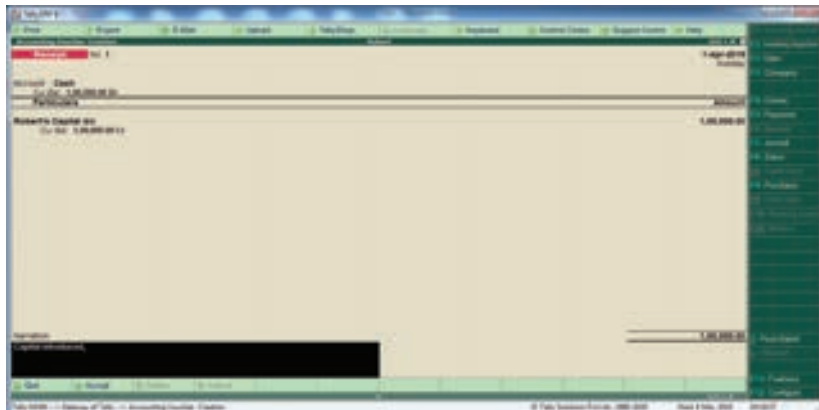


Figure 10.23 Creation of Receipt voucher

**(2) An account was opened with State Bank of India and deposited ₹ 30,000**

F4: Contra voucher

Account: State Bank of India

Particulars: Cash

Amount: ₹ 30,000

Narration: Opened bank account  
in SBI

Accept Yes

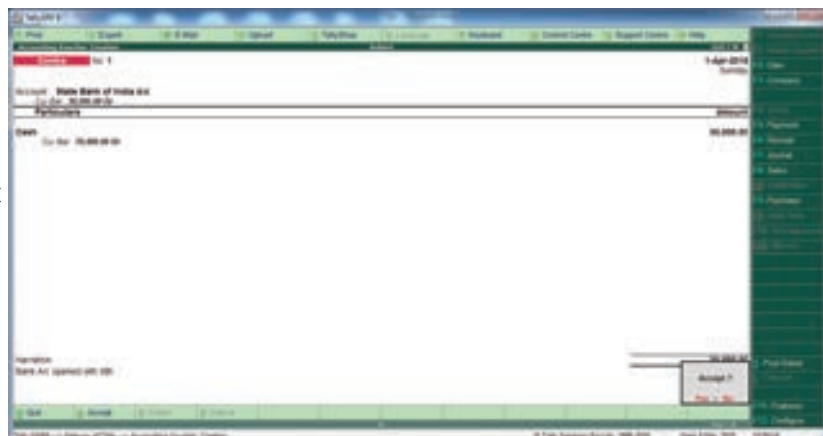
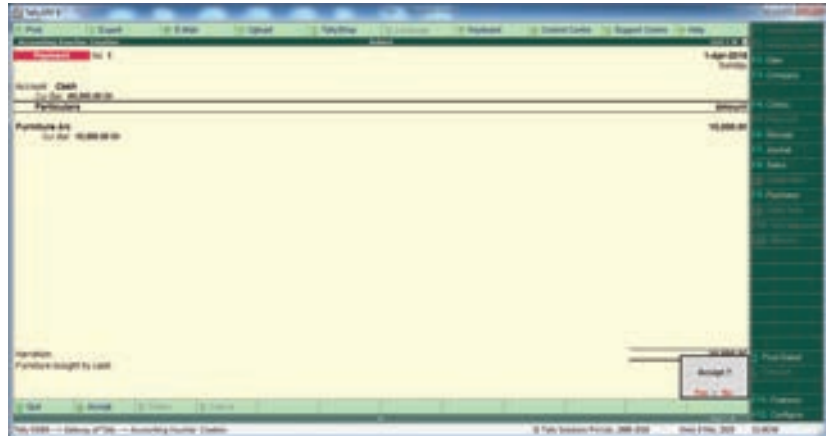


Figure 10.24 Creation of Contra voucher



**(3) Purchased furniture by paying cash ₹ 10,000**

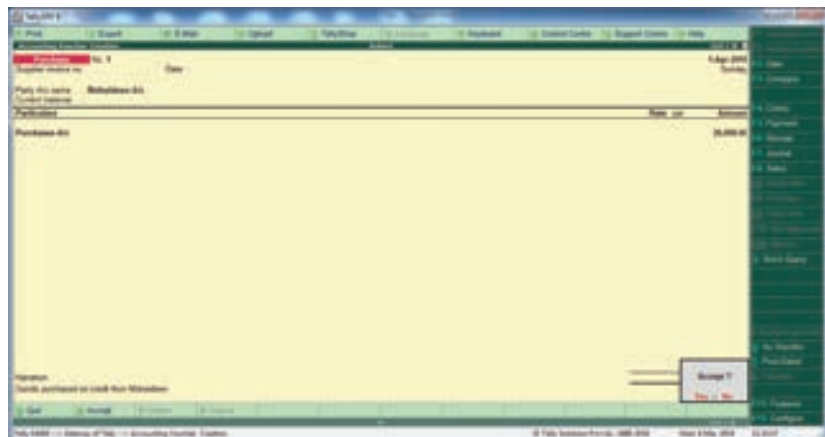
F5: Payment voucher  
Account: Cash  
Particulars: Furniture A/c  
Amount: ₹ 10,000  
Narration: Furniture bought by cash  
Accept Yes



**Figure 10.25 Creation of Payment voucher**

**(4) Goods purchased on credit from Mohaideen for ₹ 20,000**

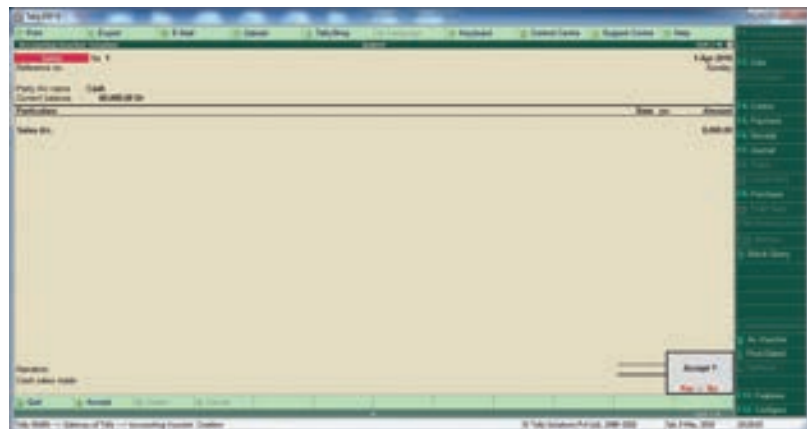
F9: Purchase voucher  
Party A/c name: Mohaideen A/c  
Particulars: Purchases A/c  
Amount: ₹ 20,000  
Narration: Goods purchased on credit from Mohaideen  
Accept Yes



**Figure 10.26 Creation of Purchase voucher**

**(5) Cash sales made for ₹ 8,000**

F8: Sales voucher  
Account: Cash  
Particulars: Sales A/c  
Amount: ₹ 8,000  
Narration: Cash sales made  
Accept Yes



**Figure 10.27 Creation of Sales voucher**



**(6) Goods purchased from Rathinam for ₹ 5,000 and money deposited in CDM**

F9: Purchase voucher

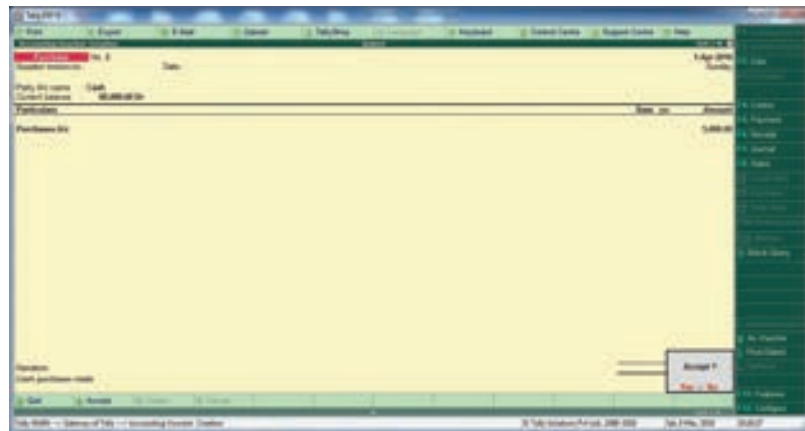
Account: Cash

Particulars: Purchases A/c

Amount: ₹ 5,000

Narration: Cash purchases made

Accept Yes



**Figure 10.28 Creation of Purchase voucher**

**(7) Goods sold to Rony on credit for ₹ 60,000**

F8: Sales voucher

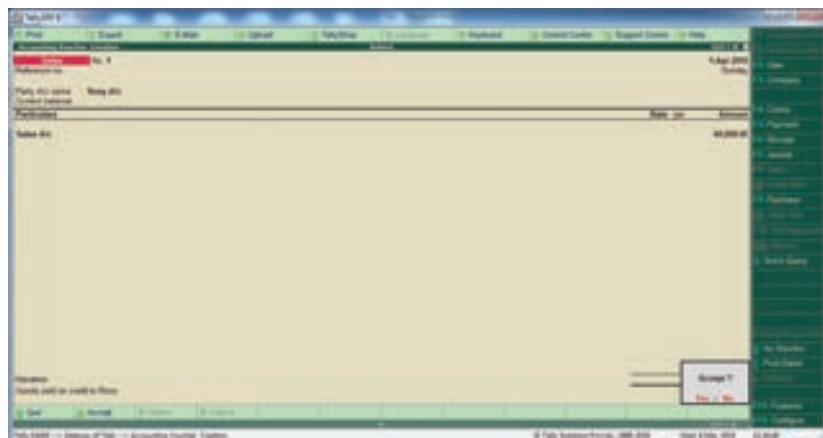
Party A/c name: Rony A/c

Particulars: Sales A/c

Amount: ₹ 60,000

Narration: Goods sold on credit to Rony

Accept Yes



**Figure 10.29 Creation of Sales voucher**

**(8) Money withdrawn from bank for office use ₹ 9,000**

F4: Contra voucher

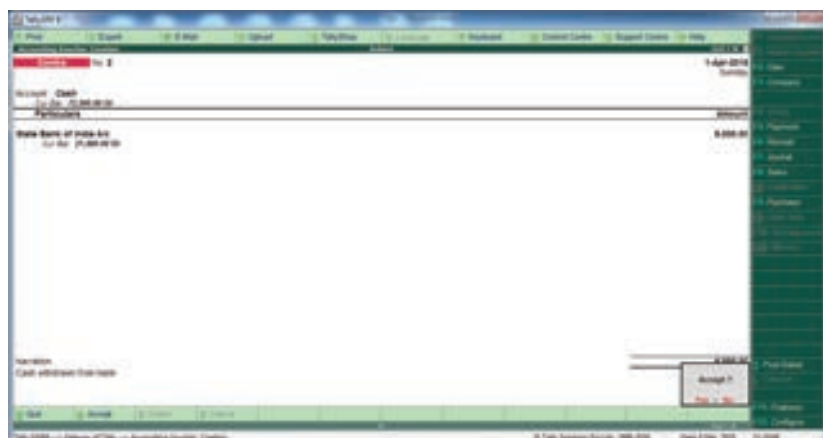
Account: Cash

Particulars: State Bank of India A/c

Amount: ₹ 9,000

Narration: Cash withdrawn from bank

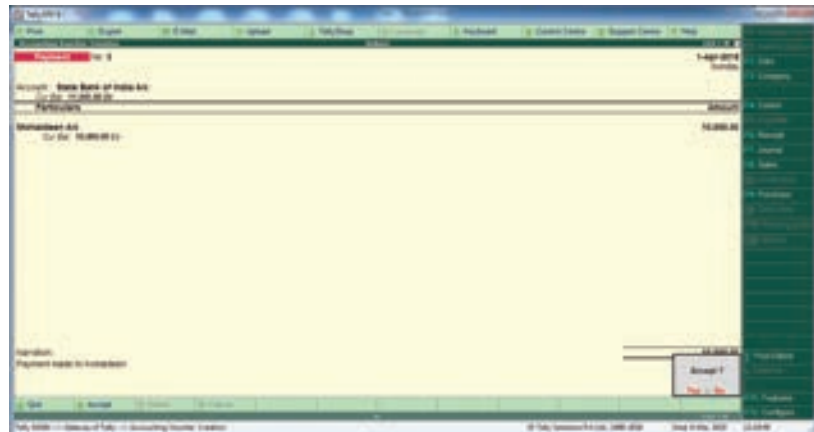
Accept Yes



**Figure 10.30 Creation of Contra voucher**

**(9) Part payment of ₹ 10,000 made to Mohaideen by cheque**

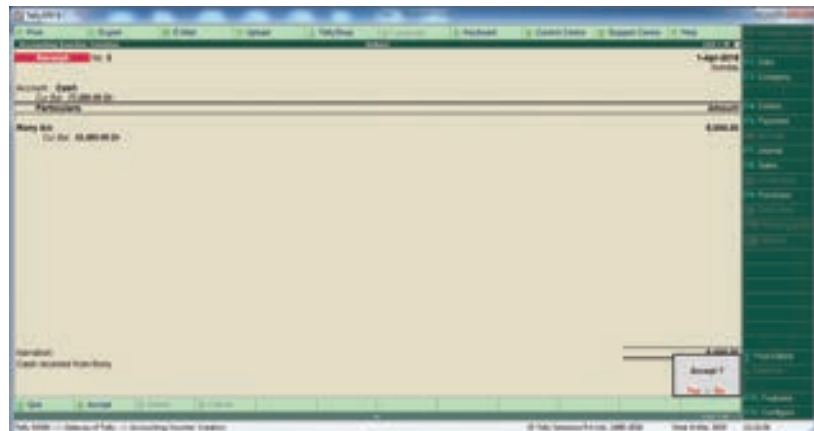
F5: Payment voucher  
Account: State Bank of India  
Particulars: Mohaideen A/c  
Amount: ₹ 10,000  
Narration: Payment made to Mohaideen by cheque  
Accept Yes



**Figure 10.31 Creation of Payment voucher**

**(10) Rony made part payment of ₹ 5,000 by cash**

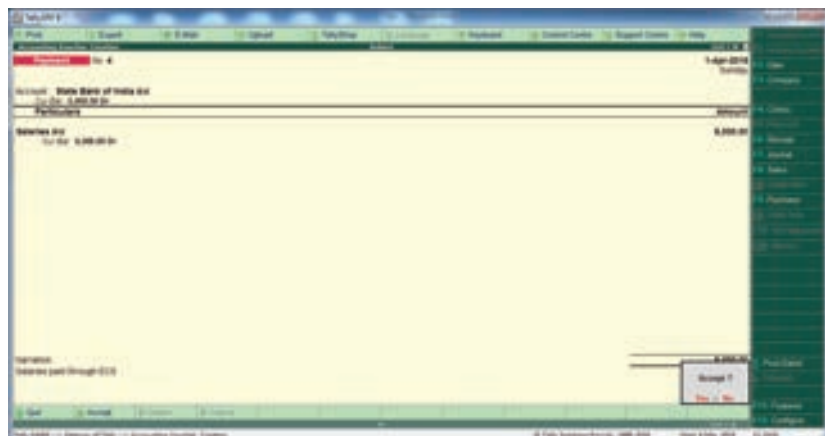
F6: Receipt voucher  
Account: Cash  
Particulars: Rony A/c  
Amount: ₹ 5,000  
Narration: Cash received from Rony  
Accept Yes.



**Figure 10.32 Creation of Receipt voucher**

**(11) Salaries paid to staff through ECS ₹ 6,000**

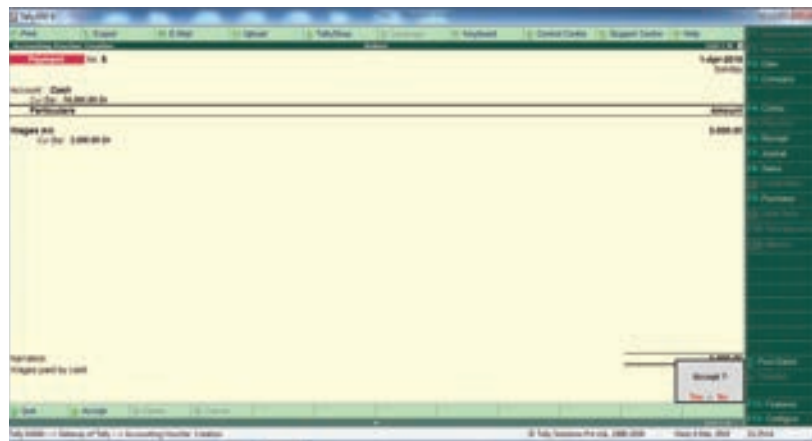
F5: Payment voucher  
Account: State Bank of India  
Particulars: Salaries A/c  
Amount: ₹ 6,000  
Narration: Salaries paid through ECS  
Accept Yes



**Figure 10.33 Creation of Payment voucher**

**(12) Wages of ₹ 3,000 paid by cash**

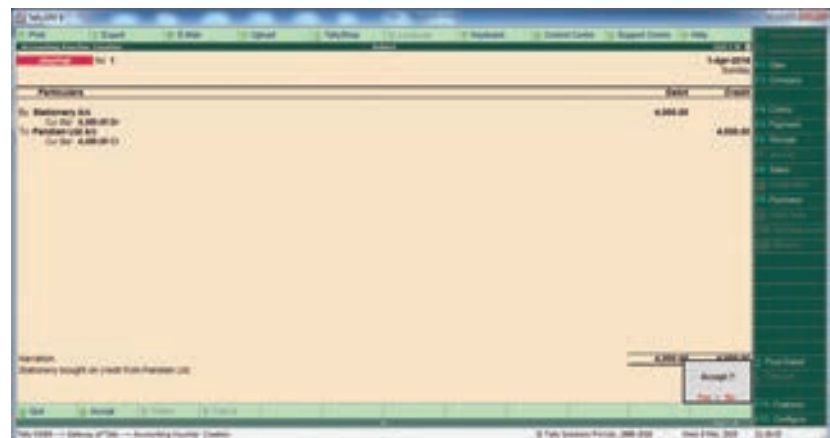
F5: Payment voucher  
 Account: Cash  
 Particulars: Wages A/c  
 Amount: ₹ 3,000  
 Narration: Wages paid by cash  
 Accept Yes



**Figure 10.34 Creation of Payment voucher**

**(13) Purchased stationery from Pandian Ltd. on credit ₹ 4,000**

F7: Journal voucher  
 Particulars: Stationery  
 Amount: ₹ 4,000  
 To Pandian Ltd.  
 Amount: ₹ 4,000  
 Narration: Stationery bought on credit from Pandian Ltd.  
 Accept Yes



**Figure 10.35 Creation of Journal voucher**

**5. To view reports**

**(i) To view Trial Balance**

Gateway of Tally > Reports > Display > Trial Balance > AltF1 (detailed)

Particulars	Report For 1-Apr-2019	
	Debit	Credit
<b>Capital Account</b>		1,00,000.00
Robert's Capital A/c		1,00,000.00
<b>Current Liabilities</b>		14,000.00
Sundry Creditors		14,000.00
<b>Fixed Assets</b>	10,000.00	
Furniture A/c	10,000.00	
<b>Current Assets</b>	1,34,000.00	
Sundry Debtors	56,000.00	
Cash-in-Hand	74,000.00	
Bank Accounts	4,000.00	
<b>Sales Accounts</b>		68,000.00
Sales A/c		68,000.00
<b>Purchase Accounts</b>	75,000.00	
Purchases A/c	75,000.00	
<b>Direct Expenses</b>	3,000.00	
Wages A/c	3,000.00	
<b>Indirect Expenses</b>	10,000.00	
Salaries A/c	6,000.00	
Stationery A/c	4,000.00	
<b>Grand Total</b>	<b>1,82,000.00</b>	<b>1,82,000.00</b>

**Figure 10.36 Trial Balance**

**(ii) To view Profit and Loss Account**

F10: A/c Reports > Profit & Loss A/c > AltF1 (detailed)  
(or)

Gateway of Tally > Reports > Profit & Loss A/c > AltF1 (detailed)

PARTICULARS		PARTICULARS	
Robert For 1-Apr-2018		Robert For 1-Apr-2018	
<b>Purchase Accounts</b>		<b>Sales Accounts</b>	
Purchases A/c	25,000.00	Sales A/c	68,000.00
Direct Expenses	3,000.00		
Wages A/c			
Indirect Expenses	10,000.00		
Salaries A/c	6,000.00		
Stationery A/c	4,000.00		
<b>Net Profit</b>	<b>30,000.00</b>		
<b>Total</b>	<b>68,000.00</b>	<b>Total</b>	<b>68,000.00</b>

**Figure 10.37 Profit and Loss Account**

**(iii) To view Balance Sheet**

F10: A/c Reports > Balance Sheet > AltF1 (detailed)  
(or)

Gateway of Tally > Reports > Balance Sheet > AltF1 (detailed)

Liabilities		Assets	
Robert as at 1-Apr-2018		Robert as at 1-Apr-2018	
<b>Current Liabilities</b>		<b>Fixed Assets</b>	
Robert's Capital A/c	1,00,000.00	Fixed Assets	10,000.00
Loans (Liability)	14,000.00	Furniture A/c	10,000.00
Current Liabilities	14,000.00	<b>Current Assets</b>	<b>1,34,000.00</b>
Sundry Creditors	14,000.00	Sundry Debtors	50,000.00
<b>Profit &amp; Loss A/c</b>	<b>30,000.00</b>	Cash-in-Hand	74,000.00
Opening Balance		Bank Accounts	8,000.00
Current Period	30,000.00		
<b>Total</b>	<b>1,44,000.00</b>	<b>Total</b>	<b>1,44,000.00</b>

**Figure 10.38 Balance Sheet**

- (iv) To view Ratio Analysis
  - F10: A/c Reports > Ratio Analysis
  - (or)
  - Gateway of Tally > Reports > Ratio Analysis

Principal Groups	Robert For 1-Apr-2018	Principal Ratios	Robert For 1-Apr-2018
Working Capital (Current Assets - Current Liabilities)	74,000.00 Dr	Current Ratio (Current Assets / Current Liabilities)	9.57 : 1
Cash in Hand	5,000.00 Dr	Quick Ratio (Current Assets - Stock-in-Hand / Current Liabilities)	9.57 : 1
Bank Accounts		Debt/Equity Ratio (Loans (Liability) / Capital Account + Net Profit)	0.00 : 1
Bank OD A/c		Gross Profit %	58.82 %
Sundry Debtors (Use IS Today)	55,000.00 Dr	Net Profit %	44.12 %
Sundry Creditors (Use IS Today)	14,000.00 Cr	Operating Cost % (as percentage of Sales Accounts)	51.88 %
Sales Accounts	68,000.00 Cr	Receiv. Turnover in days (payment performance of Debtors)	6.70 days
Purchase Accounts	25,000.00 Dr	Return on Investment % (Net Profit / Capital Account + Net Profit)	23.08 %
Stock in Hand		Return on Wkg. Capital % (Net Profit / Working Capital)	25.00 %
Net Profit	30,000.00 Cr		
Wkg. Capital Turnover (Sales Accounts / Working Capital)	0.57		
Inventory Turnover (Sales Accounts / Closing Stock)	0.00		

Figure 10.39 Ratio Analysis

- (v) To view Day Book
  - F10: A/c Reports > Day Book > AltF1 (detailed)
  - (or)
  - Gateway of Tally > Reports > Display > Day Book > AltF1 (detailed)

Date	Particulars	Vch Type	Vch No.	Debit Amount	Credit Amount
1-4-2018	Cash	Contra	1		30,000.00
1-4-2018	State Bank of India A/c	Contra	2		9,000.00
1-4-2018	Furniture A/c	Payment	1	10,000.00	
1-4-2018	Mohammed A/c	Payment	2	10,000.00	
1-4-2018	Salaries A/c	Payment	3	4,000.00	
1-4-2018	Wages A/c	Payment	4	3,000.00	
1-4-2018	Robert's Capital A/c	Receipt	1		1,00,000.00
1-4-2018	Rony A/c	Receipt	2		5,000.00
1-4-2018	Stationery A/c	Journal	1	4,000.00	
1-4-2018	Pandian Ltd A/c	Sales	1		8,000.00
1-4-2018	Rony A/c	Sales	2		60,000.00
1-4-2018	Mohammed A/c	Purchase	1	20,000.00	
1-4-2018	Purchases A/c	Purchase	2		5,000.00

Figure 10.40 Day Book

## Practical problem 2

The following balance sheet has been prepared from the books of Bright on 1-4-2018.

Liabilities	₹	Assets	₹
Capital	2,26,000	Machinery	1,00,000
Sundry creditors:		Furniture	10,000
Ramesh A/c	24,000	Stock	20,000
		Sundry debtors	
		Shankar	50,000
		Cash in hand	15,000
		Cash at bank	55,000
	2,50,000		2,50,000

During the year the following transactions took place:

- Wages paid by cash ₹ 2,000
- Rent paid by cheque ₹ 5,000
- Cash purchases made for ₹ 3,000
- Good purchased on credit from Senthamarai ₹ 15,000
- Goods sold on credit to Pushparaj ₹ 25,000
- Payment made to Senthamarai by cheque ₹ 5,000
- Cash received from Shankar ₹ 30,000
- Cash sales made for ₹ 6,000
- Depreciate machinery at 10%
- Closing stock on 31.03.2019 ₹ 15,000

You are required to prepare trading and profit and loss account for the year ended 31-03-2019 and a balance sheet as on that date using Tally.

### Solution

Following steps are to be followed to enter the transactions in Tally.ERP 9

#### 1. To create company

Company Info > Create Company

Type the Name as Bright and keep all other fields as they are and choose 'Yes' to accept.

#### 2. To maintain accounts only

Gateway of Tally > F11 Accounting Features > General > Maintain accounts only: Yes > Accept Yes

#### 3. To create ledger accounts with opening balances

Gateway of Tally > Masters > Accounts Info > Ledgers > Single Ledger > Create

Creation of	Name	Under	Opening balance	Accept
Bright's Capital A/c	Bright's Capital A/c	Capital Account	2,26,000	Yes
Ramesh A/c (Sundry creditors)	Ramesh A/c	Sundry Creditors	24,000	Yes
Machinery A/c	Machinery A/c	Fixed Assets	1,00,000	Yes
Furniture A/c	Furniture A/c	Fixed Assets	10,000	Yes
Opening stock	Opening stock	Stock-in-Hand	20,000	Yes
Shankar A/c (Sundry debtors)	Shankar A/c	Sundry Debtors	50,000	Yes
Cash in hand	Cash	Cash-in-Hand	15,000	Yes
Cash at bank	Bank	Bank Accounts	55,000	Yes

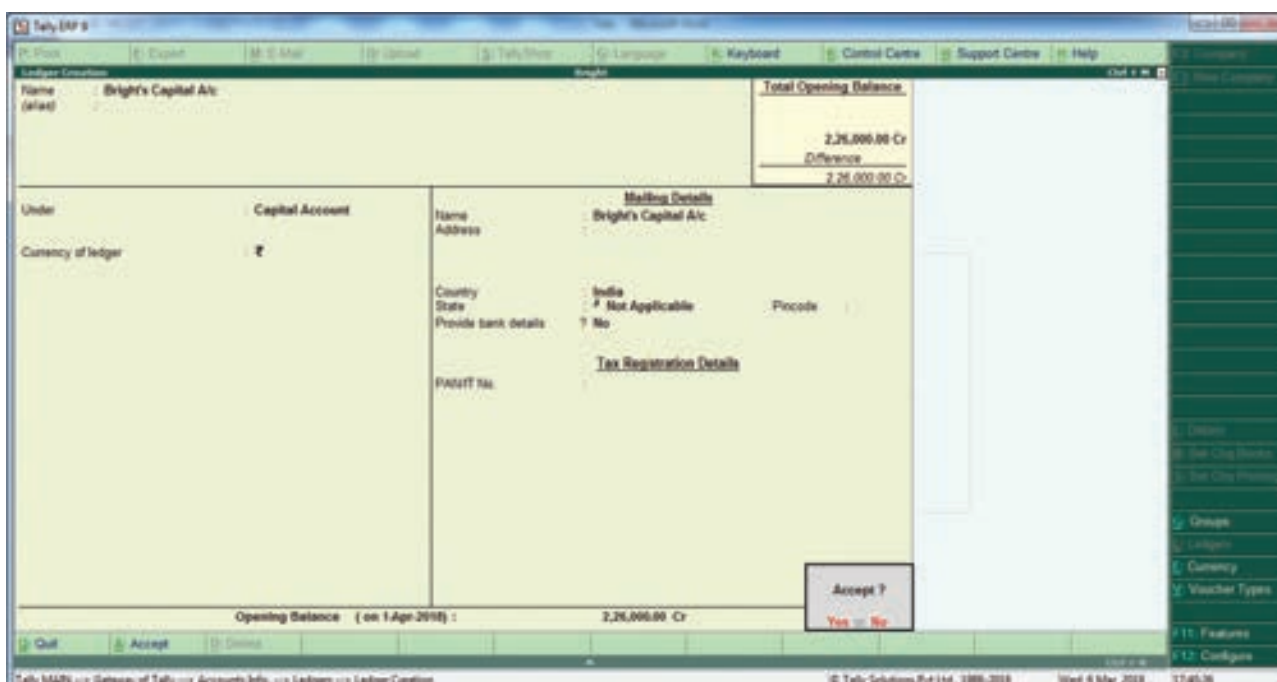


Figure 10.41 Creation of Bright's Capital A/c

### Note

Cash account need not be created as it is a default ledger. Only the opening balance has to be recorded by altering the cash account.

To record the opening balance of cash:

Gateway of Tally > Masters > Accounts Info > Ledgers > Single Ledger > Alter



To delete or alter a transaction:

Gateway of Tally > Reports > Display > Day Book > (Choose the voucher to be deleted or altered) Delete or make changes and Accept > Yes

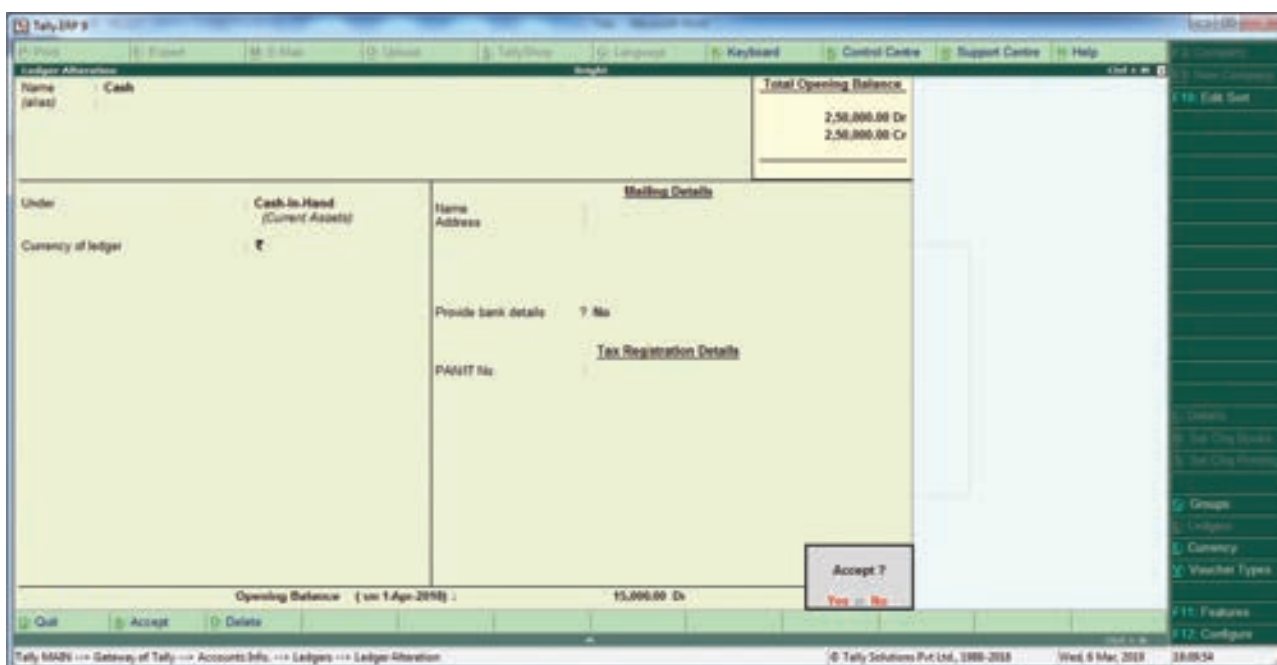


Figure 10.42 Recording of opening balance of cash

After creating the ledgers and recording the opening balances of ledger accounts the balance sheet of Bright is shown as in the following figure:

Liabilities		Assets	
Bright as at 1-Apr-2018		Bright as at 1-Apr-2018	
Capital Account	2,58,000.00	Fixed Assets	1,58,000.00
Bright's Capital A/c	2,26,000.00	Furniture	10,000.00
Loans (Liability)		Machinery A/c	1,00,000.00
Current Liabilities	24,000.00	Current Assets	1,00,000.00
Sundry Creditors		Closing Stock	20,000.00
Profit & Loss A/c		Sundry Debtors	60,000.00
Opening Balance		Cash-in-Hand	15,000.00
Current Period		Bank Accounts	55,000.00
<b>Total</b>	<b>2,58,000.00</b>	<b>Total</b>	<b>2,58,000.00</b>

Figure 10.43 Balance sheet

#### 4. To create ledger accounts for transactions

Creation of	Name	Under	Accept
Wages A/c	Wages A/c	Direct Expenses	Yes
Rent A/c	Rent A/c	Indirect Expenses	Yes
Purchases A/c	Purchases A/c	Purchases Accounts	Yes
Senthamarai A/c	Senthamarai A/c	Sundry Creditors	Yes
Sales A/c	Sales A/c	Sales Accounts	Yes
Pushparaj A/c	Pushparaj A/c	Sundry Debtors	Yes
Depreciation A/c	Depreciation A/c	Indirect Expenses	Yes



## 5. To enter transactions through vouchers

Gateway of Tally > Transactions > Accounting Vouchers

### Example: Wages of ₹ 2,000 paid by cash

F5: Payment voucher

Account: Cash

Particulars: Wages A/c

Amount: ₹ 2,000

Narration: Wages paid by cash

Accept Yes

In the similar way, record the other transactions. Use Payment Voucher for rent paid and payment to Senthamarai.

Use Purchase Voucher for credit purchases from Senthamarai and cash purchases.

Use Sales Voucher for credit sales to Pushparaj and cash sales.

Use Receipt Voucher for cash received from Shankar.

Use Journal Voucher for depreciation.

### To record closing stock

Since maintain accounts only is set to 'Yes' and integrate accounts and inventory is set to 'No' under accounting features, stock has to be recorded manually. Hence, the closing stock has to be recorded by altering the stock account and while entering the date of closing stock, the date of opening stock has to be entered. The following procedure is to be followed:

Gateway of Tally > Masters > Accounts Info > Ledgers > Single Ledger > Alter > Stock > Closing balance > Date (opening date) > Amount > Accept Yes

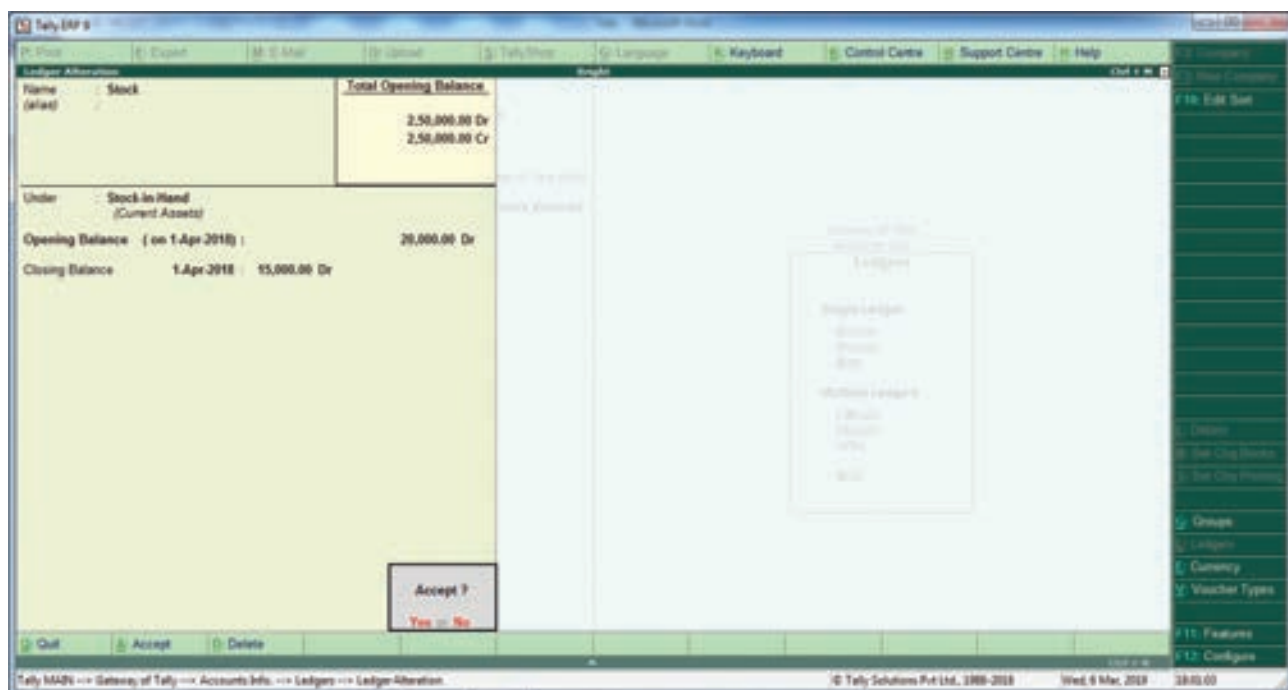


Figure 10.44 Recording closing stock

## 6. To view reports

### (i) To view Profit and Loss Account

F10: A/c Reports > Profit & Loss A/c > AltF1 (detailed)

(or)

Gateway of Tally > Reports > Profit & Loss A/c > AltF1 (detailed)

Particulars		Bright For 1-Apr-2018	Particulars		Bright For 1-Apr-2018
Opening Stock		20,000.00	Sales Accounts		31,000.00
Stock	20,000.00		Sales A/c	31,000.00	
Direct Expenses	2,000.00	2,000.00	Closing Stock		15,000.00
Wages A/c	2,000.00		Stock	15,000.00	
Indirect Expenses		33,000.00	Net Loss		8,000.00
Depreciation	10,000.00				
Purchases A/c	18,000.00				
Rent A/c	8,000.00				
<b>Total</b>		<b>35,000.00</b>	<b>Total</b>		<b>35,000.00</b>

Figure 10.45 Profit and Loss Account

### (ii) To view Balance Sheet

F10: A/c Reports > Balance Sheet > AltF1 (detailed)

(or)

Gateway of Tally > Reports > Balance Sheet > AltF1 (detailed)

Liabilities		Bright as at 1-Apr-2018	Assets		Bright as at 1-Apr-2018
Equity		2,25,000.00	Fixed Assets		1,00,000.00
Bright's Capital A/c	2,25,000.00		Furniture	10,000.00	
Loans (Liability)			Machinery A/c	90,000.00	
Current Liabilities	34,000.00	34,000.00	Current Assets		1,51,000.00
Sundry Creditors	34,000.00		Closing Stock	15,000.00	
			Sundry Debtors	45,000.00	
			Cash-in-Hand	48,000.00	
			Bank Accounts	45,000.00	
			Profit & Loss A/c		9,000.00
			Opening Balance		
			Current Period	8,000.00	
<b>Total</b>		<b>2,80,000.00</b>	<b>Total</b>		<b>2,80,000.00</b>

Figure 10.46 Balance Sheet



## Student activity

### Debate: Computerised Accounting System Vs Manual Accounting System

#### Points to remember

- ❖ Automated accounting system is an approach to maintain up-to-date accounting records with the aid of accounting software.
- ❖ Gateway of tally is the opening screen of tally. It is shown on the right pane which contains menu options such as transactions and reports.
- ❖ Accounting group is a collection of ledger accounts of same nature.
- ❖ Tally has two predefined ledgers, Cash and Profit & Loss A/c.
- ❖ Different types of vouchers such as receipt, payment, sales, purchases, etc. can be used for recording transactions in Tally.
- ❖ Deposit of cash into bank account and withdrawal of cash from bank account are recorded in contra voucher.
- ❖ Journal vouchers are used for recording transactions such as depreciation, provision for bad debts, rectification entries, etc.

#### Self-examination questions

##### I Multiple choice questions

##### Choose the correct answer

- Accounting report prepared according to the requirements of the user is
  - Routine accounting report
  - Special purpose report
  - Trial balance
  - Balance sheet
- Function key F11 is used for
  - Company Features
  - Accounting vouchers
  - Company Configuration
  - None of these
- Which submenu displays groups, ledgers and voucher types in Tally?
  - Inventory vouchers
  - Accounting vouchers
  - Company Info
  - Account Info
- What are the predefined Ledger(s) in Tally?
  - Cash
  - Profit & Loss A/c
  - Capital A/c
  - Only (i)
  - Only (ii)
  - Both (i) and (ii)
  - Both (ii) and (iii)
- Contra voucher is used for
  - Master entry
  - Withdrawal of cash from bank for office use
  - Reports
  - Credit purchase of assets
- Which is not the default group in Tally?
  - Suspense account
  - Outstanding expense
  - Sales account
  - Investments



7. Salary account comes under which of the following head?  
 (a) Direct Incomes (b) Direct Expenses (c) Indirect Incomes (d) Indirect Expenses
8. ₹ 25,000 withdrawn from bank for office use. In which voucher type, this transaction will be recorded  
 (a) Contra Voucher (b) Receipt Voucher (c) Payment Voucher (d) Sales Voucher
9. In which voucher type credit purchase of furniture is recorded in Tally  
 (a) Receipt voucher (b) Journal voucher (c) Purchase voucher (d) Payment voucher
10. Which of the following options is used to view Trial Balance from Gateway of Tally?  
 (a) Gateway of Tally -> Reports -> Trial Balance  
 (b) Gateway of Tally -> Trial Balance  
 (c) Gateway of Tally -> Reports -> Display -> Trial Balance  
 (d) None of these

### Answers

1(b)	2(a)	3(d)	4(c)	5(b)	6(b)	7(d)	8(a)	9(b)	10(c)
------	------	------	------	------	------	------	------	------	-------

### II Very short answer questions

1. What is automated accounting system?
2. What are accounting reports?
3. State any five accounting reports.
4. What is Accounting Information System (AIS)?
5. What is a group in Tally.ERP 9?

### III Short answer questions

1. Write a brief note on accounting vouchers.
2. What are the pre-defined ledgers available in Tally.ERP 9?
3. Mention the commonly used voucher types in Tally.ERP 9.
4. Explain how to view profit and loss statement in Tally.ERP 9.
5. Explain any five applications of computerised accounting system.

### IV Exercises

1. Record the following transactions in Tally.
 

<p>(a) Devi commenced a business with a capital of ₹ 4,00,000</p> <p>(b) An account was opened with Indian Bank and deposited ₹ 60,000</p> <p>(c) Purchased furniture by paying cash ₹ 15,000</p> <p>(d) Goods purchased on credit from Sumathy for ₹ 50,000</p> <p>(e) Cash sales made for ₹ 10,000</p> <p>(f) Goods purchased from Raja for ₹ 5,000 and paid by cheque</p> <p>(g) Goods sold to Arun on credit for ₹ 70,000</p>	<p>(h) Money withdrawn from bank for office use ₹ 25,000</p> <p>(i) Part payment of ₹ 30,000 made to Sumathy by cheque</p> <p>(j) Arun made part payment of ₹ 10,000 by cash</p> <p>(k) Salaries paid to staff through ECS ₹ 36,000</p> <p>(l) Carriage on purchases of ₹ 6,000 paid by cash</p> <p>(m) Purchased computer from Muthu Ltd. on credit ₹ 44,000</p>
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2. The following balance sheet has been prepared from the books of Pearl on 1-4-2018.

Liabilities	₹	Assets	₹
Capital	1,60,000	Buildings	40,000
Sundry creditors:		Furniture	20,000
Maya A/c	20,000	Stock	10,000
		Sundry debtors	
		Peter	20,000
		Cash in hand	30,000
		Cash at bank	60,000
	1,80,000		1,80,000

During the year the following transactions took place.

- |  |  |
|--|--|
| (a) Wages paid by cash ₹ 4,000                     | (f) Payment made to Yazhini through NEFT ₹ 6,000 |
| (b) Salaries paid by cheque ₹ 10,000               | (g) Cash received from Peter ₹ 10,000            |
| (c) Cash purchases made for ₹ 4,000                | (h) Cash sales made for ₹ 4,000                  |
| (d) Good purchased on credit from Yazhini ₹ 30,000 | (i) Depreciate buildings at 20%                  |
| (e) Goods sold on credit to Jothi ₹ 40,000         | (j) Closing stock on 31.03.2019 ₹ 9,000          |

You are required to prepare trading and profit and loss account for the year ended 31-03-2019 and a balance sheet as on that date using Tally.

### CASE STUDY

Venkat has been running a large departmental store for more than 20 years. The customers are happy with the quality and service. As a result, he opened few more departmental stores in different areas. He has now more than 50 employees working in his stores. He has been maintaining all the records manually. As the business expanded, Venkat found it difficult to manage the business efficiently. His daughter Latha, who has recently completed her Master of Commerce, wanted to help her father in his business. She identified the following issues:

- Some of the inventories are missing, but there is no evidence for that.
- Payments to the suppliers were delayed, though the cash flow was not a problem.
- Some of the products were over supplied in all the stores.
- In the recently opened branches, some highly demanded products were out of stock.
- There has been no control over the expenditure.

Latha thinks, if this situation continues, the business may lose its reputation and may even incur loss. To overcome these issues, she strongly feels the need for computerised accounting system.

Do you think, these issues can be solved easily with the help of CAS? If you think so, justify your view.

### To explore further

Is Tally the only Accounting software available? Explore and find out few more Accounting software applications

### Reference

Official Guide to Financial Accounting using Tally.ERP 9, Tally Education Private Limited, BPB Publications, Bengaluru



# GLOSSARY

Accounting features	கணக்கியல் அம்சங்கள்
Accounting groups	கணக்கியல் தொகுப்புகள்
Accounting information system	கணக்கியல் தகவல் அமைப்பு
Accounting ratios	கணக்கியல் விகிதங்கள்
Accounting reports	கணக்கியல் அறிக்கைகள்
Accounting software	கணக்கியல் மென்பொருள்
Accumulated loss	குவிந்த நட்பம்
Accumulated profit	குவிந்த இலாபம்
Additional capital	கூடுதல் முதல்
Administrative expenses	நிர்வாகச் செலவுகள்
Admission of partner	கூட்டாளி சேர்ப்பு
Allotment money	ஒதுக்கீட்டுப் பணம்
Annuity table	ஆண்டுத்தொகை அட்டவணை
Application money	விண்ணப்பப் பணம்
Authorised capital	அங்கீகரிக்கப்பட்ட முதல்
Automated accounting system	தானியங்கி கணக்கியல் அமைப்பு
Average profit	சராசரி இலாபம்
Average stock	சராசரி சரக்கிருப்பு
Bills payable account	செலுத்தற்குரிய மாற்றுச்சீட்டு கணக்கு
Bills receivable account	பெறுதற்குரிய மாற்றுச்சீட்டு கணக்கு
Bonus issue	மேலூதியப் பங்கு வெளியீடு
Called up capital	அழைக்கப்பட்ட முதல்
Calls in advance	அழைப்பு முன்பணம்
Calls in arrears	அழைப்பு நிலுவை
Capital gearing ratio	முதல் உந்துதிறன் விகிதம்
Capital ratio	முதல் விகிதம்
Capital reserve	முதலினக் காப்பு
Capitalisation	மூலதனமாக்கல்
Cash and cash equivalents	ரொக்கம் மற்றும் ரொக்கத்திற்கு சமமானவை
Closing capital	இறுதி முதல்
Common seal	பொது முத்திரை
Common size balance sheet	பொது அளவு இருப்புநிலைக் குறிப்பு
Common size income statement	பொது அளவு வருமான அறிக்கை
Company	நிறுவனம்
Company features	நிறுவன அம்சங்கள்
Comparative balance sheet	ஒப்பீட்டு இருப்புநிலைக் குறிப்பு
Comparative income statement	ஒப்பீட்டு வருமான அறிக்கை
Comparative statement	ஒப்பீட்டு அறிக்கை
Computerised accounting system	கணினிமய கணக்கியல் முறை
Continuing partner	தொடரும் கூட்டாளி
Contra voucher	எதிர்பதிவு சான்றாவணம்
Cost of revenue from operations	விற்பனை மூலம் கிடைத்த வருவாய்க்கான அடக்கவிலை
Creditors account	கடன்நீத்தோர் கணக்கு
Creditors turnover ratio	கடன்நீத்தோர் விற்பனை விகிதம்

Current account	நடப்பு கணக்கு
Current assets	நடப்பு சொத்துகள்
Current investments	குறுகிய கால முதலீடுகள்
Current liabilities	நடப்புப் பொறுப்புகள்
Current ratio	நடப்பு விகிதம்
Current year	நடப்பு ஆண்டு
Death of a partner	கூட்டாளியின் இறப்பு
Debentures	கடன்நீட்டுப் பத்திரங்கள்
Debt collection period	கடன் வசூலிப்புக் காலம்
Debt equity ratio	புற அக பொறுப்பு விகிதம்
Debt payment period	கடன் செலுத்தும் காலம்
Debtors account	கடனாளிகள் கணக்கு
Debtors turnover ratio	கடனாளிகள் விற்பனை விகிதம்
Donation	நன்கொடை
Drawings	எடுப்புகள்
Entrance fees	நுழைவுக் கட்டணம்
Equity shares	நேர்மைப் பங்குகள்
Executor's account	நிறைவேற்றாளர் கணக்கு
Expenses payable	கொடுபட வேண்டிய செலவுகள்
Face value	முக மதிப்பு
Fictitious asset	கற்பனைச் சொத்து
Final call money	இறுதி அழைப்பு பணம்
Financial statement analysis	நிதிநிலை அறிக்கை பகுப்பாய்வு
Financial statements	நிதிநிலை அறிக்கை
Firm	நிறுவனம்
First call money	முதல் அழைப்பு பணம்
Fixed assets turnover ratio	நிலைச்சொத்துகள் விற்பனை விகிதம்
Fixed capital	நிலைமுதல்
Fluctuating capital	மாறுபடும் முதல்
Forfeiture of shares	பங்கு ஒறுப்பிழப்பு
Gaining ratio	ஆதாய விகிதம்
Gateway of Tally	Tally தொடக்க திரை
General reserve	பொது காப்பு
Goodwill	நற்பெயர்
Gross profit ratio	மொத்த இலாப விகிதம்
Income and expenditure account	வருவாய் செலவினக் கணக்கு
Income received in advance	முன்கூட்டிப் பெற்ற வருமானம்
Incoming partner	உள்வரும் கூட்டாளி
Incomplete records	முழுமை பெறாத பதிவேடுகள்
Intangible asset	புலனாகாச் சொத்து
Interest on capital	முதல் மீது வட்டி
Interest on drawings	எடுப்புகள் மீதான வட்டி
Inventories	சரக்கிருப்பு
Inventory turnover ratio	சரக்கிருப்பு விற்பனை விகிதம்

Issued capital	வெளியிடப்பட்ட முதல்
Joint stock company	கூட்டுப் பங்கு நிறுவனம்
Journal voucher	குறிப்பேட்டு சான்றாவணம்
Legacy	உயில்கொடை
Liquidity	நீர்மைத் தன்மை
Long term solvency	நீண்டகால செயல்திறன்
Memorandum revaluation account	நினைவு குறிப்பு மறுமதிப்பீடு கணக்கு
Minimum subscription	குறைமப் பங்கொப்பம்
Net profit ratio	நிகர இலாப விகிதம்
Net tangible assets	நிகர புலனாகும் சொத்துக்கள்
Net worth method	நிகர மதிப்பு முறை
New partner	புதிய கூட்டாளி
New profit ratio	புதிய இலாப விகிதம்
Non operating expenses	இயக்கம் சாரா செலவுகள்
Non operating income	இயக்கம் சாரா வருவுகள்
Non recurring expenses	திருட்ப திருட்ப நிகழாச் செலவுகள்
Non recurring incomes	திருட்ப திருட்ப நிகழா வருமானங்கள்
Non-current investments	நீண்டகால முதலீடுகள்
Normal profit	சாதாரண இலாபம்
Not-for profit organization	இலாப நோக்கமற்ற அமைப்புகள்
Number of years of purchase	கொள்முதல் ஆண்டுகளின் எண்ணிக்கை
Old partner	பழைய கூட்டாளி
Old ratio	பழைய விகிதம்
Opening capital	தொடக்க முதல்
Operating cost ratio	இயக்க விகிதம்
Operating expenses	இயக்கச் செலவுகள்
Operating profit	இயக்க இலாபம்
Outgoing partner	வெளிச்செல்லும் கூட்டாளி
Over subscription	மிகை ஒப்பம்
Paid up capital	செலுத்தப்பட்ட முதல்
Partner	கூட்டாளி
Partner's loan account	கூட்டாளியின் கடன் கணக்கு
Partnership	கூட்டாண்மை
Payments	செலுத்தல்கள்
Payments voucher	செலுத்தல்கள் சான்றாவணம்
Perpetual succession	நிலைபேற்றுத் தொடர்ச்சி
Preference shares	முன்னுரிமைப் பங்குகள்
Previous year	முந்தைய ஆண்டு
Private company	தனி நிறுவனம்
Private placement	தனியார் ஒதுக்கு
Pro rata allotment	விகித அளவு ஒதுக்கீடு
Profit	இலாபம்
Profit and loss appropriation account	இலாப நட்டப் பகிர்வு கணக்கு
Profit and loss suspense account	அனாமத்து இலாபநட்டக் கணக்கு
Profitability	இலாபத்தன்மை

Proprietary ratio	உரிமையாளர் விகிதம்
Prospectus	தகவலறிக்கை
Public company	பொது நிறுவனம்
Public issue	பொது வெளியீடு
Purchase voucher	கொள்முதல் சான்றாவணம்
Quick ratio	விரைவு விகிதம்
Ratio analysis	விகித ஆய்வு
Receipts	பெறுதல்கள்
Receipts and payments account	பெறுதல்கள் - செலுத்தல்கள் கணக்கு
Receipts voucher	பெறுதல்கள் சான்றாவணம்
Reserve capital	காப்பு முதல்
Reserves and surplus	காப்பும் மிகுதியும்
Retirement of a partner	கூட்டாளி விலகல்
Return on investment	முதலீடுகள் மீதான வருவாய்
Revaluation account	மறுமதிப்பீட்டு கணக்கு
Revaluation loss	மறுமதிப்பீட்டு நட்டம்
Revaluation profit	மறுமதிப்பீட்டு இலாபம்
Revenue from operations	விற்பனை மூலம் கிடைத்த வருவாய்
Right issue	உரிமை வெளியீடு
Sacrificing ratio	தியாக விகிதம்
Sales voucher	விற்பனை சான்றாவணம்
Securities premium	பத்திர முனைமம்
Selling and distribution expenses	விற்பனை மற்றும் பகிர்வுச் செலவுகள்
Share capital	பங்கு முதல்
Shareholders funds	பங்குதாரர் நிதி
Shares	பங்குகள்
Short term borrowings	குறுகிய காலக் கடன்கள்
Short term solvency	குறுகிய கால செயல்திறன்
Single entry system	ஒற்றைப் பதிவு முறை
Solvency	செயல் திறன்
Statement of affairs	நிலை அறிக்கை
Subscribed capital	ஒப்பிய முதல்
Subscriptions	சந்தா
Subsequent year	வரும் ஆண்டு
Super profit	உயர் இலாபம்
Tangible fixed assets	புலனாகும் நிலைச் சொத்துக்கள்
Trade payables	கணக்கின் மூலம் செலுத்த வேண்டியவைகள்
Trade receivables	கணக்கின் மூலம் பெறவேண்டியவைகள்
Under subscription	குறை ஒப்பம்
Undistributed profits and reserves	பகிர்ந்துதரா இலாபங்கள் மற்றும் காப்புகள்
Unlimited liability	வரையறா பொறுப்பு
Voucher	சான்றாவணம்
Weighted average profit	கூட்டு சராசரி இலாபம்
Workmen compensation fund	தொழிலாளர் ஈட்டு நிதி

# Accountancy – Class XII

## List of Authors and Reviewers

### Domain Experts

1. **Dr. L. Cesis Dastan,**  
Associate Professor of Commerce, Presidency College (Autonomous), Chennai.
2. **Dr. A. Krishnan,**  
Associate Professor of Commerce, Presidency College (Autonomous), Chennai.
3. **Dr. L. Jenitra,**  
Vice Principal and Associate Professor of Commerce, Holy Cross College (Autonomous), Tiruchirapalli.
4. **Dr. P. Jayakumar,**  
Vice Principal and Assistant Professor of Commerce, St. Thomas College of Arts and Science, Chennai.

### Reviewers

1. **Mrs. Jayanthi Ramesh,**  
Trainer, Cambridge International Examination, Chennai.
2. **Mr. V. Ulaganathan,**  
P.G. Assistant (Selection Grade) in Commerce, Government Model Hr. Sec. School, Saidapet, Chennai.
3. **Dr. A. Sarojini,**  
P.G. Assistant in Commerce, Government Hr. Sec. School, Kadambathur, Thiruvallur. Dt.

### Academic Coordinator

**Mr. V. Ulaganathan,**  
P.G. Assistant (Selection Grade) in Commerce, Government Model Hr. Sec. School, Saidapet, Chennai.

### Art and Design Team

#### Layout

Yogesh B  
Prasanth C  
Mathan Raj R  
Daniel A  
Rajesh Thangapan

#### Wrapper Design

Kathir Arumugam

#### In-House

QC - Kamatchi Balan  
Arun Kamaraj P

#### Co-ordination

Ramesh Munisamy

### Authors

1. **Dr. S. Rajeswari,**  
P.G. Assistant (Selection Grade) in Commerce, St. Joseph's Anglo Indian Girls Hr. Sec. School, Tiruchirapalli.
2. **Mrs. M. Maharasi,**  
Associate Professor and Head, Department of Commerce, Quaid-E-Millath Government College for Women, Chennai
3. **Dr. N. Vasudevan,**  
Assistant Professor of Commerce, Ramakrishna Mission Vivekananda College (Autonomous), Chennai.
4. **Dr. S. Kumar,**  
P.G. Assistant (Selection Grade) in Commerce, SKV Hr. Sec. School, Kurinjipadi.
5. **Mr. A. Sibi Chakravarthi,**  
P.G. Assistant (Selection Grade) in Commerce, Tmt. Manjammal Govt. Girls Hr. Sec. School, Tenkasi.
6. **Dr. S. Srinivasan,**  
Assistant Professor of Commerce, Ramakrishna Mission Vivekananda College (Autonomous), Chennai.

### QR Coordinators

**M. Saravanan, B.T,**

GGHSS, Puthupalayam, Vazhapadi, Salem.

**A. Devi Jesintha, B.T,**

GHS, N.m.kovil, Vellore.

**M. Murugesan, B.T,**

PUMS. Pethavelankottagam, Muttupettai, Thiruvarur.

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