

## GOVERNMENT OF TAMILNADU

# HIGHER SECONDARY SECOND YEAR 

## ACCOUNTANCY

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Department of School Education

Untouchability is Inhuman and a Crime

## Government of Tamil Nadu

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## ACCOUNTANCY

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E-Book


Assessment

## 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

## SUBDIVISIONS

## HOW TO USE THE BOOK

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.

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.

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

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

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.

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

## TO EXPLORE FURTHER

## GLOSSARY

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.

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.

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

## 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 |
| :---: | :---: | :---: | :---: | :---: |
| - B.Com-Bachelor of Commerce (General) <br> - B.Com-(Hons.) <br> - B.Com-(Accounting \& Finance) <br> - B.Com-(Corporate Secretaryship) <br> - B.Com-(Computer Applications) <br> - B.Com-(International Business) <br> - B.Com-(Bank Management) <br> - B.B.A-(Bachelor of Business Administration) <br> - B.B.M-(Bachelor of Bank Management) <br> - B.Com-(Co-operation) <br> - M.Com-(Master of Commerce-Five year Integrated programme) | - CA-Chartered Accountancy <br> - CMA-Cost and Management Accountancy <br> - CS-Company Secretaryship <br> - BL-Bachelor of Law - Five year Integrated Programme <br> - CIMA (Chartered Institute of Management Accountants <br> - ACCA (Association of Chartered Certified Accountants (UK)) <br> - CPA (Certified Public Accountant (USA)) <br> - CFP-Certified Financial Planner(USA) | - M.Com- <br> Master of Commerce <br> - M.Com(Accounting and Finance) <br> - M.Com-(Corporate Secretaryship) <br> - M.Com- (Computer Applications) <br> - M.Com- (International Business and Banking) <br> - M.Com- (Co operative Management) <br> - M.B.A-Master of Business Administration <br> - M.B.A-(Finance) <br> - M.B.A-(Marketing) <br> - M.B.A-(Human Resource Management) <br> - M.B.A-(Advertisement and Salesmanship) <br> - M.B.A-(Hospital Management) <br> - MHRM (Master of Human Resource Management) <br> - MLM (Master of Labour Management) | - Indian Administrative Service (IAS) <br> - Indian Police Service (IPS) <br> - Indian Foreign Service (IFS) <br> - Indian Revenue Service (IRS) <br> - Indian Audit and Account Service (IA\&AS) <br> - B.Ed., (Bachelor of Education) and followed by <br> - M.Ed., (Master of Education) Programmes <br> - PG Diploma programme | - M.Phil- Master of Philosophy <br> - Ph.D- Doctor of Philosophy |

## EMPLOYMENT OPPORTUNITIES

Accounts assistant
Audit assistant
Investment consultant
Tax practitioner
Company Secretary
Teaching

## Accountant

Cost analyst
Financial advisor
Chartered Accountant
Cost and Management Accountant
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 <br> www.icai.org | ICAI Bhawan, <br> 122, Mahatma Gandhi Road <br> Post box No. 3314 <br> Nungambakkam, <br> Chennai - 600034 | Coimbatore <br> Erode <br> Madurai <br> Salem <br> Tiruchirapalli <br> Tirunelveli <br> Tirupur <br> Tuticorin <br> Kanchipuram <br> Kumbakonam <br> Sivakasi |
| Company Secretaryship | The Institute of company secretaries of India www.icsi.edu | 9, Wheat Crofts Road, Nungambakkam, Chennai-600034 | Coimbatore <br> Madurai <br> Salem |
| Cost and Management Accountancy | The Institute of Cost Accountants of India <br> www.icma.in | Southern India Regional Council, CMA Bhawan <br> 4,Montieth Lane, <br> Egmore <br> Chennai - 600008 | Coimbatore <br> Erode <br> Madurai <br> Mettur-Salem <br> Nellai-Pearl <br> Neyveli <br> Ranipet-Vellore <br> 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.
www.tntextbooks.in


## UNIT <br> ACCOUNTS FROM INCOMPLETE RECORDS



## Learning objectives

To enable the students to

- Understand the features and limitations of incomplete records
$\diamond$ Prepare statement of affairs and calculate profit or loss from incomplete records

↔ Prepare final accounts from incomplete records

## Points to recall

The following points are to be recalled before learning accounts from incomplete records:
$\stackrel{\text { D }}{ }$ 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.



### 1.1 I ntroduction

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.

Adjusted closing capital $=$ Closing capital + Drawings - 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.

Closing Capital + Drawings - Additional Capital - Opening Capital = 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 |
|  |  |
| Less: Additional capital introduced during the year | xxx |
| Adjusted closing capital | xxx |
| Less: Opening Capital | xxx |
| Profit or loss for the year | xxx |

## I Ilustration 1

From the following particulars ascertain profit or loss:

|  | $₹$ |
| :--- | ---: |
| Capital at the beginning of the year (1 $1^{\text {st }}$ April, 2016) | $2,00,000$ |
| Capital at the end of the year $\left(31^{\text {st }}\right.$ 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 ${ }^{\text {st }}$ 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 | $\mathbf{1 , 2 0 , 0 0 0}$ |

## I Ilustration 2

From the following particulars ascertain profit or loss:

|  | $₹$ |
| :--- | ---: |
| Capital as on $1^{\text {st }}$ April 2018 | $1,60,000$ |
| Capital as on 31 $1^{\text {st }}$ 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 ${ }^{\text {st }}$ 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 | $\mathbf{( - )} \mathbf{5 , 0 0 0}$ |

## 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 ${ }^{\text {st }}$ 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) | $\mathbf{2 , 1 0 , 0 0 0}$ |
| Loss for the year ending 31.3.2019 | $(-) 40,000$ |

## I Ilustration 4

From the following details, calculate the capital as on $31^{\text {st }}$ 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 ${ }^{\text {st }}$ December, 2018

| Particulars | $₹$ |
| :--- | ---: |
| Closing capital (as on 31.12.2018) (balancing figure) | $\mathbf{3 5 , 0 0 0}$ |
| 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 |

## I Ilustration 5

From the following details, calculate the missing figure:

|  | $₹$ |
| :--- | ---: |
| Capital as on $1^{\text {st }}$ April, 2017 | $2,50,000$ |
| Capital as on $31^{\text {st }}$ 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 ${ }^{\text {st }}$ March, 2018

| Particulars | ₹ |
| :--- | ---: |
| Closing capital (as on 31.3.2018) | $2,75,000$ |
| Add: Drawings during the year (balancing figure) | $\mathbf{2 0 , 0 0 0}$ |
| Less: Additional capital introduced during the year | $2,95,000$ |
| Adjusted closing capital | 30,000 |
| Less: Opening capital (as on 1.4.2017) | $2,65,000$ |
| Profit made during the year | $2,50,000$ |
|  | 15,000 |



### 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.

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

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 |

## I Ilustration 6

Following are the balances of Shanthi as on $31^{\text {st }}$ 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 $31^{\text {st }}$ December 2018 and calculate capital as at that date.

## Solution

In the books of Shanthi
Statement of affairs as on 31 ${ }^{\text {st }}$ December, 2018

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | ---: | :--- | ---: |
| Sundry creditors | 25,000 | Cash | 4,000 |
| Bills payable | 4,000 | Stock | 45,000 |
| Capital (balancing figure) | $\mathbf{1 , 6 6 , 0 0 0}$ | Debtors | 70,000 |
|  |  | Bills receivable | 6,000 |
|  |  | Machinery | 60,000 |
|  |  | Furniture | 10,000 |
|  |  | $1,95,000$ |  |

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

## Illustration 7

On $1^{\text {st }}$ 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 $31^{\text {st }}$ March, 2018

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | ---: | :--- | ---: |
| Creditors | 9,000 | Cash | 5,000 |
| Bills payable | 6,000 | Cash at bank | 24,000 |
| Capital (balancing figure) | $\mathbf{8 8 , 0 0 0}$ | 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 $31^{\text {st }}$ March, 2018 is prepared.
Statement of profit or loss for the year ending 31 ${ }^{\text {st }}$ 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 |

## I Ilustration 8

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

| Particulars | $\mathbf{1 . 4 . 2 0 1 8}$ | $\mathbf{3 1 . 3 . 2 0 1 9}$ |
| :--- | ---: | ---: |
|  |  | $₹$ |
| Cash | 43,000 | 29,000 |
| Stock of goods |  | $1,20,000$ |
| Sundry debtors | $1,30,000$ |  |
| Sundry creditors | 84,000 | $1,10,000$ |
| Loan | $1,05,000$ | $1,02,000$ |
| Business premises | 25,000 | 20,000 |
| Furniture | $2,50,000$ | $2,50,000$ |

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 $1^{\text {st }}$ April, 2018

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | ---: | :--- | ---: |
| Sundry creditors | $1,05,000$ | Cash | 43,000 |
| Loan | 25,000 | Stock of goods | $1,20,000$ |
|  | $\mathbf{4 , 0 0 , 0 0 0}$ | Sundry debtors | 84,000 |
|  |  | Business premises | $2,50,000$ |
|  |  | Furniture | 33,000 |

## 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) | $\mathbf{4 , 4 2 , 0 0 0}$ | Business premises | $2,50,000$ |
|  |  | Furniture | 45,000 |

Statement of profit or loss for the year ending 31 ${ }^{\text {st }}$ 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 | $\mathbf{2 7 , 0 0 0}$ |

## 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.

## I llustration 9

Ahmed does not keep proper books of accounts. Find the profit or loss made by him for the year ending 31 ${ }^{\text {st }}$ March, 2018.

| Particulars | $\mathbf{1 . 4 . 2 0 1 7}$ | 31.3.2018 <br> $₹$ |  |
| :--- | ---: | ---: | ---: |
| 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 ${ }^{\text {st }}$ March, 2017

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | ---: | :--- | ---: |
| Bank overdraft | 14,000 | Cash in hand | 800 |
| Creditors | 60,000 | Stock | 12,000 |
| Capital (balancing figure) | $\mathbf{9 2 , 8 0 0}$ | 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 ${ }^{\text {st }}$ March, 2018

| Liabilities | $₹$ | Assets | $₹$ | $₹$ |
| :--- | ---: | :--- | ---: | ---: |
| Creditors | 72,000 | Bank balance |  | 18,000 |
| Capital (balancing figure) | $\mathbf{1 , 0 4 , 0 0 0}$ | 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 |
|  |  |  | $1,76,000$ |  |

Statement of profit or loss for the year ending 31 ${ }^{\text {st }}$ 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 | $\mathbf{3 5 , 2 0 0}$ |

### 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

$$
\text { Dr. } \quad \text { Total debtors account } \quad \text { Cr. }
$$

| Particulars | ₹ | Particulars | ₹ |
| :---: | :---: | :---: | :---: |
| To Balance b/d (opening balance) <br> To Sales A/c (credit sales) <br> To Bank A/c (cheque dishonoured) <br> To Bills receivable A/c <br> (bills dishonoured) | xxx xxx xxx xxx | By Cash A/c (received) <br> By Bank A/c (cheques received) <br> By Discount allowed A/c <br> By Sales returns A/c <br> By Bad debts A/c <br> By Bills receivable A/c <br> (bills received) <br> By Balance c/d <br> (closing balance) | xxx <br> xxx <br> xxx <br> xxx <br> xxx <br> xxx <br> xxx |
|  | xxx |  | xxx |

## I llustration 10

Find out credit sales from the following information:

|  | $₹$ |
| :--- | ---: |
| Debtors on 1st January 2018 | 40,000 |
| Cash received from debtors | $1,00,000$ |
| Discount allowed | 5,000 |
| Sales returns | 2,000 |
| Debtors on 31st 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) | $\mathbf{1 , 2 7 , 0 0 0}$ | By Discount allowed A/c | 5,000 |
| (balancing figure) |  | By Sales returns A/c | 2,000 |
|  |  | By Balance c/d | 60,000 |
|  |  |  | $1,67,000$ |

## I Ilustration 11

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

|  | $₹$ |
| :--- | ---: |
| Debtors on $1^{\text {st }}$ 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 ${ }^{\text {st }}$ 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) | $\mathbf{1 , 9 0 , 0 0 0}$ | By Returns inward A/c | 15,000 |
| (balancing figure) |  | By Bad debts A/c | 5,000 |
|  |  | By Balance c/d | 70,000 |

Total Sales $=$ Cash Sales + Credit Sales
$=₹ 1,40,000+₹ 1,90,000$
$=₹ 3,30,000$
(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 <br> (Bills receivable honoured) | xxx |
| To Sundry debtors A/c (Bills receivable received during the year) | xxx | By Sundry debtors A/c <br> (Bills receivable dishonoured) <br> By Balance c/d <br> (closing balance) | xxx xxx |
|  | xxx |  | xxx |

## I Ilustration 12

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

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

## Solution

Dr.
Bills receivable account
Cr.

| Particulars | ₹ | Particulars | $₹$ |
| :--- | :---: | :--- | ---: |
| To Balance b/d | 20,000 | By Cash A/c |  |
| To Debtors A/c |  |  |  |
| (Bills received during the year <br> - balancing figure) | 75,000 | By Debtors A/c <br> (Bills receivable dishonoured) <br> By Balance c/d | 50,000 |

## I llustration 13

From the following particulars, calculate total sales.

| Particulars | ₹ |
| :--- | ---: |
| Debtors on 1 ${ }^{\text {st }}$ April 2017 | $1,50,000$ |
| Bills receivable on 1 ${ }^{\text {st }}$ 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 ${ }^{\text {st }}$ March, 2018 | 30,000 |
| Sundry debtors on $31^{\text {st }}$ 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 |
| (Bills received during the year balancing figure) | 90,000 | By Debtors A/c <br> (Bills receivable dishonoured) <br> By Balance c/d | 10,000 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) <br> (balancing figure) | 4,90,000 | By Bills receivable $\mathrm{A} / \mathrm{c}^{*}$ <br> (bills received) <br> By Balance c/d | 90,000 |
|  |  |  | 1,30,000 |
|  | 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 <br> (opening balance) | xxx |
| To Bank A/c (cheques paid) |  |  |  |
| (bills payable A/c |  |  |  |

## I Ilustration 14

From the following details, calculate credit purchases.

| Particulars | $₹$ |
| :--- | ---: |
| Creditors on 1st April, 2018 |  |
| Returns outward | 50,000 |
| Cash paid to creditors | 6,000 |
| Creditors on 31st March, 2019 | $1,60,000$ |
|  | 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) |  |
| To Balance c/d | 70,000 | (balancing figure) | $\mathbf{1 , 8 6 , 0 0 0}$ |
|  | $2,36,000$ |  |  |

(iv) Format of bills payable account
Dr.
Bills payable account
Cr.

| Particulars | $₹$ | Particulars | $₹$ |
| :---: | :---: | :---: | :---: |
| To Cash / Bank A/c <br> (bills payable paid) | xxx | By Balance b/d <br> (opening balance) |  |
| To Sundry creditors A/c <br> (bills payable dishonoured) | xxx | By Sundry creditors A/c <br> (bills accepted) | xxx |
| To Balance c/d <br> (closing balance) | xxx |  | xxx |
|  |  |  | xxx |

## I Ilustration 15

From the following particulars calculate total purchases.

| Particulars | $₹$ |
| :--- | ---: |
| Sundry creditors on 1 ${ }^{\text {st }}$ April, 2017 | 75,000 |
| Bills payable on 1 ${ }^{\text {st }}$ 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 $1^{\text {st }}$ March, 2018 | 50,000 |
| Bills payable on 31 ${ }^{\text {st }}$ 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 <br> To Balance c/d | By Sundry creditors A/c <br> (Bills accepted - <br> balancing figure) |

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) | $\mathbf{4 , 8 0 , 0 0 0}$ |
| 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

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

## I Ilustration 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 <br> $₹$ | Closing |
| :--- | ---: | ---: |
| ₹ |  |  |

## Solution

Dr.
Bills receivable account
Cr .

| Particulars | $₹$ | Particulars | $₹$ |
| :--- | ---: | :--- | :---: |
| To Balance b/d | $\mathbf{1 1 , 2 0 0}$ | By Cash A/c | By Debtors A/c |
| To Debtors A/c |  | (bills receivable dishonoured) <br> (Bills received - <br> balancing figure ) | By Balance c/d |

Dr.
Total debtors account
Cr.

| Particulars | ₹ | Particulars | $₹$ |
| :--- | :---: | :--- | :---: |
| To Balance b/d | 60,000 | By Cash A/c (received) |  |
| To Bills receivable A/c (dishonoured) | 1,200 | By Discount allowed A/c |  |
| To Sales A/c (credit) | $\mathbf{1 , 4 4 , 0 0 0}$ | By Bad debts A/c <br> (balancing figure) | By Bills receivable A/c <br> (bills received) <br> By Balance c/d |

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 <br> (bills accepted - balancing figure) |  |

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) | $\mathbf{8 4 , 5 0 0}$ |
| To Bills payable A/c (bills accepted) | 8,000 | (balancing figure) |  |
| To balance c/d | 28,000 |  |  |
|  | $1,09,500$ |  | $1,09,500$ |

## I Ilustration 17

From the following details of Abdul who maintains incomplete records, prepare Trading and Profit and Loss account for the year ended $31^{\text {st }}$ March, 2018 and a Balance Sheet as on the date.

| Particulars | 1.4.2017 <br> $₹$ | 31.3.2018 <br> $₹$ |
| :--- | ---: | ---: |
| Stock |  | $1,00,000$ |
| Sundry debtors | $2,50,000$ | 50,000 |
| Cash | $2,50,000$ |  |
| Furniture | 25,000 | 40,000 |
| Sundry creditors | 10,000 | 10,000 |

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 $\quad 4,50,000$

## 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) | $\mathbf{6 , 6 0 , 0 0 0}$ | By Discount allowed A/c | 25,000 |
|  |  | By Balance c/d | $3,50,000$ |
|  | $9,10,000$ |  | $9,10,000$ |

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) | $\mathbf{4 , 9 5 , 0 0 0}$ |
| To Balance c/d | $1,75,000$ | (balancing figure) |  |
|  | $6,45,000$ |  | $6,45,000$ |

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 | 1,15,000 |  |  |
|  | 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) | 80,000 |  |  |
|  | 1,35,000 |  | 1,35,000 |

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 |
|  | 3,15,000 |  | Debtors | 3,50,000 |
| Less: Drawings | 40,000 | 2,75,000 |  |  |
|  |  | 4,50,000 |  | 4,50,000 |

## I llustration 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 $31^{\text {st }}$ 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 | $1,42,000$ |

Other information:

|  | Particulars | 1.4.2018 <br> $₹$ | 31.3.2019 <br> $₹$ |
| :--- | :--- | ---: | ---: |
| 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) <br> By Balance c/d (balancing figure) | 1,20,000 |
| To Sales A/c (credit) | 1,40,000 |  | 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 1,40,000 | 3,00,000 |
| Credit $\quad \underline{74,000}$ | 1,30,000 | By Closing stock | 60,000 |
| To Wages | 10,000 |  |  |
| To Gross profit c/d | 1,80,000 |  |  |
|  | 3,60,000 |  | 3,60,000 |
| 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 | 1,39,000 |  |  |
|  | 1,80,000 |  | 1,80,000 |

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 | $1,53,000$ |
|  |  |  |  | $4,13,000$ |  |

## 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 | $\mathbf{1 - 4 - 2 0 1 8}$ | ₹1-3-2019 |
| :--- | ---: | ---: | ---: |
|  |  | 20,000 | 20,000 |
| Plant and machinery |  | 9,000 | 16,000 |
| Stock |  | 2,000 | 5,300 |
| Sundry debtors | 5,000 | 4,000 |  |
| Sundry creditors | 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 $1^{\text {st }}$ April, 2018

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | ---: | :--- | ---: |
| Creditors | 5,000 | Cash at bank | 4,000 |
| Opening capital | $\mathbf{3 0 , 0 0 0}$ | Stock | 9,000 |
|  |  | Sundry debtors | 2,000 |
|  |  | Plant and machinery | 20,000 |
|  |  | 35,000 | 35,000 |

## 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) | $\mathbf{6 5 , 0 0 0}$ |
| To Balance c/d | 4,000 | (balancing figure) |  |
|  | 70,000 |  | 70,000 |

Dr. Trading and Profit and Loss Account for the year ended 31 ${ }^{\text {st }}$ March, 2019
Cr.

| Particulars | ₹ | Particulars |  | ₹ |
| :---: | :---: | :---: | :---: | :---: |
| To Opening stock | 9,000 | By Sales | 85,000 |  |
| To Purchases |  | Less Returns | 1,000 | 84,000 |
| Credit 65,000 |  | By Closing stock |  | 16,000 |
| Less Returns $\quad \begin{aligned} & \text { 2,000 }\end{aligned}$ | 63,000 |  |  |  |
| To Carriage inwards | 8,000 |  |  |  |
| To Gross profit c/d | 20,000 |  |  |  |
|  | 1,00,000 |  |  | 1,00,000 |
| 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 | 14,000 |  |  |  |
|  | 20,000 |  |  | 20,000 |

Balance Sheet as on 31 ${ }^{\text {st }}$ March, 2019

| Liabilities | ₹ | ₹ | Assets | ₹ | $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital | 30,000 | $\begin{array}{r} 42,000 \\ 4,000 \end{array}$ | Cash at bank |  | 6,000 |
| Add: Net profit | 14,000 |  | Stock |  | 16,000 |
| Less: Drawings Sundry creditors | 44,000 |  | Sundry debtors | 5,300 | 5,000 |
|  | 2,000 |  | Less: Provision Plant and Machinery Less: Depreciation | 300 |  |
|  |  |  |  | 20,000 |  |
|  |  |  |  | 1,000 | 19,000 |
|  |  | 46,000 |  |  | 46,000 |

## I llustration 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.

|  | $1-\mathbf{1 - 2 0 1 8}$ <br> $₹$ | 31-12-2018 <br> $₹$ |
| :--- | ---: | ---: |
| 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 $1^{\text {st }}$ January, 2018

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | :---: | :--- | :---: |
| Creditors | 15,000 | Cash in hand | 10,000 |
| Bank loan | 25,000 | Stock | 28,000 |
| Opening capital | $\mathbf{8 0 , 0 0 0}$ | Debtors | 40,000 |
| (balancing figure) |  | Bills receivable | 12,000 |
|  |  | Furniture | 30,000 |
|  |  | $1,20,000$ |  |

Dr. Trading and Profit and Loss Account for the year ended 31 ${ }^{\text {st }}$ December, $2018 \quad \mathrm{Cr}$.

| Particulars | ₹ | Particulars | ₹ |
| :---: | :---: | :---: | :---: |
| To Opening stock | 28,000 | By Sales |  |
| To Purchases |  | Cash 11,200 |  |
| Cash 4,250 |  | Credit $\quad \underline{88,800}$ | 1,00,000 |
| Credit $\quad 3 \underline{35750}$ | 40,000 | By Closing stock | 11,000 |
| To Carriage on purchases | 3,000 |  |  |
| To Gross profit c/d | 40,000 |  |  |
|  | 1,11,000 |  | 1,11,000 |
| 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 | 24,000 |  |  |
|  | 40,600 |  | 40,600 |

Balance Sheet as on 31 ${ }^{\text {st }}$ 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 |  |  |  |
|  |  | 1,51,000 |  |  | 1,51,000 |

## 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?
(a) It is an unscientific method of recording transactions
(b) Records are maintained only for cash and personal accounts
(c) It is suitable for all types of organisations
(d) 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) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## II Very short answer questions

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

## III Short answer questions

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

## IV Exercises

1. From the following particulars ascertain profit or loss:

| Particulars | $₹$ |
| :--- | ---: |
| Capital at the beginning of the year (1 $1^{\text {st }}$ April, 2018) | $5,00,000$ |
| Capital at the end of the year (31st 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 $1^{\text {st }}$ January 2018 | $2,20,000$ |
| Capital as on 31 $1^{\text {st }}$ 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 $31^{\text {st }}$ 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 ${ }^{\text {st }}$ April, 2018 | 40,000 |
| Capital as on 31 ${ }^{\text {st }}$ 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 $31^{\text {st }}$ 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 $31^{\text {st }}$ March 2019 and calculate capital as at that date.
(Answer: Capital: ₹ $2,80,000$ )
7. On $1^{\text {st }}$ 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: ₹ $\mathbf{2 , 9 0 , 0 0 0 )}$
8. Raju does not keep proper books of accounts. Following details are taken from his records.

| Particulars | 1.1.2018 <br> $₹$ | 31.12.2018 <br> $₹$ |
| :--- | ---: | ---: |
| 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: ₹ $\mathbf{3 0 , 0 0 0 )}$
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 <br> $₹$ | 31.3.2019 <br> $₹$ |
| :--- | ---: | ---: |
| 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) <|||||| 33 ||||||
10. Find out credit sales from the following information:

| Particulars | $₹$ |
| :--- | ---: |
| Debtors on $1^{\text {st }}$ April, 2018 | $1,00,000$ |
| Cash received from debtors | $2,30,000$ |
| Discount allowed | 5,000 |
| Returns inward | 25,000 |
| Debtors on 31 ${ }^{\text {st }}$ March 2019 | $1,20,000$ |

(Answer: Credit sales: ₹ $\mathbf{2 , 8 0 , 0 0 0 )}$
11. From the following details find out total sales made during the year.

| Particulars | $₹$ |
| :--- | ---: |
| Debtors on 1st 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 ${ }^{\text {st }}$ December 2018 | $2,00,000$ |
| Cash Sales | $4,60,000$ |

(Answer: Credit sales: ₹ 5,40,000; Total sales: ₹ $\mathbf{1 0 , 0 0 , 0 0 0 )}$
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 1 |  |  |  |
| st April 2018 | $2,50,000$ | Bills receivable dishonoured | 15,000 |
| Bills receivable on 1st April 2018 | 60,000 | Returns inward | 50,000 |
| Cash received from debtors | $7,25,000$ | Bills receivable on 31 ${ }^{\text {st }}$ March, 2019 | 90,000 |
| Cash received for bills receivable | $1,60,000$ | Sundry debtors on 31 $1^{\text {st }}$ March, 2019 | $2,40,000$ |
| Bad debts | 30,000 | Cash sales | $3,15,000$ |

(Answer: B/R received: ₹ $\mathbf{2 , 0 5 , 0 0 0}$; Credit sales: ₹ $9,85,000$; Total sales: ₹ $\mathbf{1 3 , 0 0 , 0 0 0 )}$
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 ${ }^{\text {st }}$ January, 2018 | 30,000 | Purchases returns | 15,000 |
| Bills payable on 1 ${ }^{\text {st }}$ January, 2018 | 25,000 | Cash purchases | $2,25,000$ |
| Paid cash to creditors | $1,20,000$ | Creditors on 31 ${ }^{\text {st }}$ December, 2018 | 25,000 |
| Paid for bills payable | 30,000 | Bills payable on 31 ${ }^{\text {st }}$ December, 2018 | 20,000 |

(Answer: B/P accepted: ₹ 25,000 ; Credit purchases: ₹ $\mathbf{1 , 5 5 , 0 0 0 ; ~ T o t a l ~ p u r c h a s e s : ~ ₹ ~} 3,80,000$ )
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 | $₹$ |
| :--- | ---: | :--- | :---: |
| Balances as on 1st April 2018 |  | Balances as on 31 ${ }^{\text {st }}$ March 2019 |  |
| 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 |
| Other information: | $₹$ |  | $₹$ |
| 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 $31^{\text {st }}$ March, 2019 and a Balance Sheet as on that date.

| Particulars | $\underset{₹}{31.3 .2018}$ | 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: ₹ $\mathbf{1 , 6 0 , 0 0 0}$; Net profit: ₹ $\mathbf{5 0 , 0 0 0}$; 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 ${ }^{\text {st }}$ 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 | $\mathbf{1 . 4 . 2 0 1 8}$ | $\mathbf{3 1 . 3 . 2 0 1 9}$ |
| :--- | ---: | ---: |
| 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
Credit sales
Opening capital
Depreciate furniture and fittings by $10 \%$ p.a.
(Answer: Closing debtors: ₹ 80,000; Gross profit: ₹ 3,20,000;
Net profit: ₹ $\mathbf{1 , 8 5 , 0 0 0 ;}$ Balance sheet total: ₹ $\mathbf{5 , 5 5 , 0 0 0 )}$
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 <br> $₹$ | 31.12.2018 <br> $₹$ |
| :--- | ---: | ---: |
| 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 $31^{\text {st }}$ December, 2018 and a balance sheet as on that date.
(Answer: Opening capital: ₹ 3,80,000; Credit purchases: ₹ $\mathbf{6 , 2 5 , 0 0 0}$;
Gross profit: ₹ $\mathbf{1 , 3 5 , 0 0 0}$; 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 <br> $₹$ | 31-12-2018 |
| :--- | ---: | ---: |
| Machinery | 60,000 | 60,000 |
| Cash at bank |  | 25,000 |
| 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: ₹ $\mathbf{1 , 1 1 , 0 0 0 ;}$ Net profit: ₹ $\mathbf{6 9 , 0 0 0}$; Balance sheet total: ₹ $2,46,000$ )

## Student activity 1.3

Fill in the missing information

| Closing capital <br> $₹$ | Drawings <br> $₹$ | Additional capital <br> $₹$ | Opening capital <br> $₹$ | Profit / Loss <br> $₹$ |
| ---: | ---: | ---: | ---: | ---: |
| $1,00,000$ | 40,000 | 20,000 | 90,000 | $?$ |
| 70,000 | 30,000 | $?$ | 40,000 | 80,000 |

9
CASE STODY

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?

## Reference

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## UNIT <br> ACCOUNTS OF NOT-FOR-PROFIT ORGANISATION




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



### 2.1 I ntroduction

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-inaid 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-forprofit 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 $\qquad$ for the year ending $\qquad$ Cr.

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

## Student activity 2.3

Recall the distinction between capital and revenue items.

## I llustration 1

From the following particulars of Tamil Educational Society, prepare Receipts and Payments account for the year ended $31^{\text {st }}$ 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 ${ }^{\text {st }}$ 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 | $\mathbf{1 5 , 3 0 0}$ |
|  |  |  | $3,01,500$ |

## | Ilustration 2

From the following particulars of Trichy Educational Society, prepare Receipts and Payments account for the year ended $31^{\text {st }}$ 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 ${ }^{\text {st }}$ 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 | $\mathbf{3 4 , 0 0 0}$ |
|  | $1,27,000$ |  | $1,27,000$ |

## I Ilustration 3

From the following particulars of Chennai Sports Club, prepare Receipts and Payments account for the year ended $31^{\text {st }}$ March, 2018.

| Particulars | $₹$ | Particulars | $₹$ | $₹$ |
| :--- | ---: | :---: | ---: | :---: |
| Opening cash balance as on 1.4.2017 | 0,000 | 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 ${ }^{\text {st }}$ 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) | 55,000 | 60,000 |
| 2018-2019 | 5,000 | 74,500 |  |  |  |
|  |  | 1,20,000 |  |  | 1,20,000 |

## Illustration 4

From the following particulars of Poompuhar Literary Association, prepare Receipts and Payments account for the year ended $31^{\text {st }}$ 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 ${ }^{\text {st }}$ 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 |  |

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 $31^{\text {st }}$ 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 ${ }^{\text {st }}$ March, $2017 \quad$ Cr.


### 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-forprofit 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 nonrecurring 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 <br> (as per the practice of the organisation) |
| :--- | :--- | :--- |
| Subscription <br> Interest on investment <br> Interest on fixed deposit <br> Sale of (old) sports materials <br> Sale of (old) newspapers <br> Collection or receipts relating to | Life membership fees <br> Legacies <br> Specific donations <br> Sale of fixed assets | Admission fee or Entrance fee <br> Special fees <br> a) Tournament |
| Spants from government and |  |  |
| b) Sports | Prize fund |  |
| c) Matches |  |  |
| d) Entertainments organisations |  |  |
| 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 eventhough 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 I ncome 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* <br> (Excess of income over expenditure) | xxx | By Deficit ${ }^{*}$ <br> (Excess of expenditure over income) | xxx |
|  | 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.

## I Ilustration 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 ${ }^{\text {st }}$ March, $2018 \quad$ 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 | $\mathbf{2 7 , 0 0 0}$ |  |  |
| (Excess of income over expenditure) |  |  | 64,000 |
|  | 64,000 |  |  |

## I Ilustration 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 ${ }^{\text {st }}$ 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 | 600 |
|  |  | (5,000 - 4,400) |  |
|  |  | By Deficit | $\mathbf{2 , 4 0 0}$ |
|  |  | (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 <br> and cash payments. | It is prepared to know whether there is an <br> excess of income over expenditure (surplus) <br> or an excess of expenditure over income <br> (deficit) during the current period. |
| 2. Nature of <br> account | It is a real account. It is a summary of <br> cash account. Cash receipts are recorded <br> on the debit side and cash payments are <br> recorded on the credit side. | It is a nominal account. It is similar to profit <br> and loss account. Expenses are recorded on <br> the debit side and incomes are recorded on <br> the credit side. |
| 3. Basis of | It is based on cash system of accounting. <br> accounting | It is based on accrual system of accounting. <br> Non-cash items like outstanding expenses, |
| 4. Opening are not recorded. | It commences with an opening balance <br> and closing <br> balance | There is no opening balance. It ends with <br> balance of cash and bank. |
| 5. Nature of |  |  |
| items | It contains actual receipts and payments <br> irrespective of revenue or capital items <br> in nature. | It contains only revenue items, that is, only <br> revenue expenses and revenue incomes. |
| 6. Period | All cash receipts and payments made <br> during the year pertaining to the past <br> period, current period and subsequent <br> period are recorded. | It contains only the items relating to the <br> 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... $\mathbf{C r}$.

| Expenditure | ₹ | Income | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | By Subscription <br> Less: Subscription for the previous year | xxx |  |
|  |  |  | 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 |
|  |  |  |  |  |

## Balance sheet as on ...

| Liabilities | ₹ | Assets | ₹ |
| :--- | :---: | :--- | :---: |
| Subscription received in advance |  | Outstanding subscription for the: <br> current year <br> for the subsequent year | xxx | | previous year |
| :--- |

## I Ilustration 8

From the following details calculate the amount that will be shown as subscription in Income and Expenditure Account for the year ending 31 ${ }^{\text {st }}$ 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 ${ }^{\text {st }}$ March, 2017 Cr.


## 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.

## I llustration 9

How the following items will appear in the final accounts of a club for the year ending $31^{\text {st }}$ March, 2019?

Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ 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 ${ }^{\text {st }}$ March 2019
Cr.

| Expenditure | ₹ | Income | ₹ | ₹ |
| :---: | :---: | :--- | :---: | :---: |
|  |  | By Subscription <br> Add: Outstanding <br> subscription for 2018-2019 | 48,000 | 12,000 |

Balance sheet as on $31^{\text {st }}$ March, 2019

| Liabilities | ₹ | Assets | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: |
| Subscription received in <br> advance for the year 2019-20 | 3,000 | Outstanding subscription $\begin{aligned} & 2017-2018 \\ & 2018-2019 \end{aligned}$ | $\begin{array}{r} 1,000 \\ 12,000 \end{array}$ | 13,000 |

## Tutorial note

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

## I Ilustration 10

How will the following items appear in the final accounts of a club for the year ending $31^{\text {st }}$ 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 ${ }^{\text {st }}$ March, 2017
Cr.


Balance sheet as on $31^{\text {st }}$ March, 2017

| Liabilities | ₹ | Assets | ₹ |
| :--- | :---: | :--- | :--- |
| Subscription received in <br> advance for the year 2017-18 | 1,500 | Outstanding subscription for the <br> year 2016-2017 | 500 |

## I Ilustration 11

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

| Particulars | 1.1.2018 <br> $₹$ | 31.12.2018 <br> $₹$ |
| :--- | ---: | ---: |
| 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 |  | $1,45,000$ |

## I llustration 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 ${ }^{\text {st }}$ December, 2018 Cr.

(b) Treatment of consumable items such as sports materials, stationery items, medicines, etc.
(i) Consumable items such as sports materials, stationery, medicines, etc., consumed during the year will appear on the debit side of income and expenditure account.
(ii) Consumption $=$ Opening stock + Purchases during the current year - Closing stock
(iii) Closing stock will appear on the assets side of the balance sheet as at the end of the year.
(iv) 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.

## I Ilustration 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 ${ }^{\text {st }}$ 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 ${ }^{\text {st }}$ March, 2019

| Liabilities | ₹ | ₹ | Assets | $₹$ | $₹$ |
| :---: | :---: | :---: | :--- | :---: | :---: |
|  |  |  | Stock of sports materials |  | 4,000 |

## I Ilustration 14

From the following details calculate the printing and stationery to be debited to Income and Expenditure Account for the year ending $31^{\text {st }}$ March, 2018 and also show how it will appear in the Balance Sheet as on 31 ${ }^{\text {st }}$ March, 2018.

Amount paid for stationery during 2017-2018
₹ 1,500
Stock of stationery on $1^{\text {st }}$ April, 2017
₹ 300
Stock of stationery on $31^{\text {st }}$ March, 2018
₹ 200

## Solution:

Dr. Income and Expenditure Account for the year ended 31 ${ }^{\text {st }}$ March, 2018
Cr.

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

Balance sheet as on 31 ${ }^{\text {st }}$ 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.

## I Ilustration 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 ${ }^{\text {st }}$ March, 2018


### 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.

Opening capital fund $=$ Assets at the beginning- Liabilities at the beginning

## I Ilustration 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 ${ }^{\text {st }}$ March, 2018

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | ---: | :--- | ---: |
| Capital fund | $\mathbf{1 , 1 5 , 0 0 0}$ | 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 |
|  |  | $1,30,000$ |  |

(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

## I Ilustration 17

From the following Receipts and Payments Account of Friends Football club, for the year ending $31^{\text {st }}$ March, 2017, prepare Income and Expenditure Account for the year ending $31^{\text {st }}$ 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 ${ }^{\text {st }}$ March, $2017 \quad$ 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 |  |  | Cash in hand | 1,800 |  |
| dinner |  | 2,000 | Cash at bank | 12,000 | 13,800 |
|  |  | 24,000 |  |  | 24,000 |

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Additional information:
(i) The club had furniture of ₹ 12,000 on $1^{\text {st }}$ 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 $1^{\text {st }}$ April 2016 was ₹ 23,000 .

## Solution

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

Dr.
for the year ended $31^{\text {st }}$ March, 2017
Cr.

| Expenditure | ₹ | ₹ | Income | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Sports materials <br> consumed <br> Purchases <br> Less: Closing stock <br> To Special dinner expenses <br> To Electricity charges <br> To Excess of income over expenditure (surplus) | $\begin{aligned} & 800 \\ & 100 \end{aligned}$ | $\begin{array}{r} 700 \\ 1,500 \\ 900 \\ \\ \mathbf{4 , 5 0 0} \\ \hline \end{array}$ | By Subscription <br> Add: Outstanding for 2016-17 <br> By Collection for special dinner | $\begin{array}{r} 5,000 \\ 600 \end{array}$ | $\begin{aligned} & 5,600 \\ & 2,000 \end{aligned}$ |
|  |  | 7,600 |  |  | 7,600 |

Balance sheet as on $31^{\text {st }}$ March, 2017


## I Ilustration 18

Following is the Receipts and Payments Account of Salem Recreation Club for the year ended $31^{\text {st }}$ March, 2019.

## In the books of Salem Recreation Club

Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ 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 $31^{\text {st }}$ March, 2018 ₹ 300 and on March 31, 2019 ₹ 500.
(iii) Capital fund as on $1^{\text {st }}$ April 2018 was ₹ 9,300.

Prepare income and expenditure account for the year ended 31 ${ }^{\text {st }}$ 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 ( $450 \times$ ₹ 30 )
Subscription received for the current year Subscription outstanding for the current year (₹ 13,500 - ₹ 12,500 )
$\square$
13,500
12,500

1,000

## In the books of Salem Recreation Club

Dr. Income and Expenditure Account for the year ended 31 ${ }^{\text {st }}$ March, 2019
Cr.

| Expenditure | ₹ | ₹ | Income | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Stationery | 2,400 | $\begin{aligned} & 2,200 \\ & 1,000 \end{aligned}$ | By Subscription <br> Add: Outstanding for 2018-19 $(450 \times ₹ 30)$ <br> By Proceeds from entertainment <br> By Sundry receipts | 12,500 | 13,500 |
| Add: Opening stock | 300 |  |  |  |  |
| Less: Closing stock <br> To Postage <br> To Excess of income over expenditure (surplus) | 2,700 |  |  | 1,000 |  |
|  | 500 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  | 12,000 |
|  |  | 22,800 |  |  | 500 |
|  |  | 26,000 |  |  | 26,000 |

Balance sheet as on $31^{\text {st }}$ March, 2019

| Liabilities | ₹ | ₹ | Assets | ₹ |
| :---: | :---: | :---: | :---: | :---: |
| Capital fund | $\begin{aligned} & 9,300 \\ & 22,800 \end{aligned}$ | $\begin{array}{r} 32,100 \\ 400 \end{array}$ | Furniture | 15,000 |
| Add: Excess of income over expenditure (surplus) <br> Subscription received in advance |  |  | Investment | 12,500 |
|  |  |  | Subscription in arrears |  |
|  |  |  | for 2018-19 | 1,000 |
|  |  |  | Stock of stationery | 500 |
|  |  |  | Cash in hand | 3,500 |
|  |  | 32,500 |  | 32,500 |

## I llustration 19

From the following Receipts and Payments account of Coimbatore Cricket Club for the year ending $31^{\text {st }}$ March 2016, prepare income and expenditure account for the year ending $31^{\text {st }}$ 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 ${ }^{\text {st }}$ 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 |

Additional information:
On $1^{\text {st }}$ 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 ${ }^{\text {st }}$ March, 2015

| Liabilities | $₹$ | Assets | ₹ |
| :--- | ---: | :--- | :---: |
| Capital fund | $\mathbf{1 0 , 5 0 0}$ | 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 ${ }^{\text {st }}$ March, 2016 Cr.


Balance sheet as on 31 ${ }^{\text {st }}$ 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 |

## I llustration 20

The following is the summary of cash transactions of Delhi Literary Club for the year ending $31^{\text {st }}$ March, 2019.

## Delhi Literary Club

Receipts and Payments Account for the year ending 31 ${ }^{\text {st }}$ 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) | 22,500 |  |  |
|  | 77,000 |  | 77,000 |

Additional information
(a) At the beginning of the year the club possessed books worth ₹ 20,000 and furniture worth ₹ 40,000 .
(b) 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 ${ }^{\text {st }}$ 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 $31^{\text {st }}$ March, 2018

| Liabilities | ₹ | Assets | ₹ |
| :--- | :---: | :--- | ---: |
| Capital fund | $\mathbf{6 3 , 2 0 0}$ | 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 ${ }^{\text {st }}$ March, $2019 \quad$ Cr.

| Expenditure | $₹$ | Income | ₹ | ₹ |
| :--- | ---: | :--- | :---: | :---: |
| To Rent and rates | 21,000 | By Entrance fees |  | 2,300 |
| To Lecture fees | 4,500 | By Subscriptions |  |  |
| To Sundry expenses |  |  |  |  |
| To Loss on sale of furniture | 2,500 | Less: Received in advance <br> during current year <br> $(25,000-22,500)$ | 1,000 | 45,000 |
| To Excess of income <br> over expenditure (surplus) | $\mathbf{1 2 , 6 0 0}$ | By Interest received on <br> fixed deposit |  | 500 |
|  | 47,800 |  |  | 47,800 |

Balance sheet as on 31 ${ }^{\text {st }}$ March, 2019

| Liabilities | ₹ | ₹ | Assets | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital fund | 63,200 | $\begin{array}{r} 75,800 \\ 2,500 \\ 1,000 \end{array}$ | Furniture <br> Less: Book value of furniture sold Books <br> Fixed deposit <br> Cash in hand | $\begin{aligned} & 40,000 \\ & 25,000 \end{aligned}$ | 15,000 |
| Add: Excess of income over expenditure | 12,600 |  |  |  |  |
| Life membership fees |  |  |  |  | 20,000 |
| Subscription received in advance |  |  |  |  | 40,000 |
|  |  |  |  |  | 4,300 |
|  |  | 79,300 |  |  | 79,300 |

## I Ilustration 21

The following is the Receipts and Payments account of Madurai City Club for the year ending $31^{\text {st }}$ March, 2018.

## Madurai City Club

Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ 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 |  |  | By Furniture |  | 20,000 |
| ₹ 4,000 for 2016-2017) |  | 30,000 | By Balance c/d: |  |  |
| To Legacies |  | 9,000 | Cash in hand | 1,500 |  |
| To Hall rent |  | 10,000 | Cash at bank | 11,000 | 12,500 |
| To Receipts for match fund |  | 22,500 |  |  |  |
|  |  | 79,000 |  |  | 79,000 |

Additional information:
On $1^{\text {st }}$ April, 2017, the club had investment of ₹ 40,000 . The club also had a credit balance of ₹ 30,000 in Match fund account. On $31^{\text {st }}$ March, 2017 subscriptions in arrears were ₹ 4,000 and the subscriptions in arrears on $31^{\text {st }}$ 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 $31^{\text {st }}$ March, 2017

| Liabilities | $₹$ | Assets | $₹$ |
| :--- | ---: | :--- | ---: |
| Capital fund |  | Investment | 40,000 |
| (Balancing figure) | $\mathbf{2 1 , 5 0 0}$ | 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 ${ }^{\text {st }}$ 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 | 13,000 | Add: Outstanding for the current year <br> By Hall rent | 26,000 |  |
| over expenditure (surplus) |  |  | 4,500 | 30,500 |
|  |  |  |  | 10,000 |
|  | 40,500 |  |  | 40,500 |

Balance sheet as on $31^{\text {st }}$ March, 2018

| Liabilities | ₹ | ₹ | Assets | ₹ |
| :---: | :---: | :---: | :---: | :---: |
| Capital fund | 21,500 |  | Furniture | 20,000 |
| Add: Excess of income over |  |  | Investment | 40,000 |
| expenditure (surplus) | 13,000 | 34,500 | Subscription outstanding | 4,500 |
| Legacies |  | 9,000 | Cash at bank | 11,000 |
| Match fund | 30,000 |  | Cash in hand | 1,500 |
| Add: Receipts for match fund | 22,500 |  |  |  |
| Less: Match expenses | $\begin{array}{r} 52,500 \\ 19,000 \\ \hline \end{array}$ | 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 liablilities 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) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 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 $31^{\text {st }}$ 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 $31^{\text {st }}$ 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 ${ }^{\text {st }}$ 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 $31^{\text {st }}$ 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 $31^{\text {st }}$ 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 ${ }^{\text {st }}$ 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 |

(Answer: Surplus: ₹ $\mathbf{1 4 , 0 0 0 )}$
7. From the following receipts and payment account, prepare income and expenditure account of Kumbakonam Basket Ball Association for the year ended 31 ${ }^{\text {st }}$ 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 |  |  |

(Answer: Deficit: ₹ $\mathbf{2 6 , 0 0 0 )}$
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 $31^{\text {st }}$ 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 $31^{\text {st }}$ March 2019?

Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ March, $2019 \quad$ 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 $31^{\text {st }}$ 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 <br> $₹$ | 31.12.2018 <br> $₹$ |
| :--- | ---: | ---: |
| 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 ₹ $\mathbf{1 0 , 0 0 0}$ )
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 ₹ $\mathbf{1 6 , 0 0 0}$ (Dr.) Sale of old sports materials: ₹ 2,000 (Cr.)
Balance Sheet: Assets side: Stock of bats and balls: ₹ $\mathbf{4 , 0 0 0 )}$
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 $1^{\text {st }}$ 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 $31^{\text {st }}$ 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 $31^{\text {st }}$ March, 2019?

| Particulars | $₹$ |
| :--- | :---: |
| Tournament fund on $1^{\text {st }}$ April 2018 | 90,000 |
| Tournament fund investment on $1^{\text {st }}$ 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 |

(Ans: Capital fund: ₹ $\mathbf{8 0 , 0 0 0 )}$
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 $31^{\text {st }}$ December, 2018 and the balance sheet as on that date.

Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ December, $2018 \quad$ Cr.

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

Additional information:
(i) Capital fund as on $1^{\text {st }}$ 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 $31^{\text {st }}$ March, 2019 and the balance sheet as on that date.
Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ March, $2019 \quad$ Cr.

| Receipts | $₹$ | Payments | $₹$ |
| :--- | ---: | :--- | ---: |
| To Balance b/d |  | By Salary | 14,000 |
| $\quad$ Cash in hand | 9,600 | By Office expenses | 7,200 |
| To Government grants |  | By Books purchased | 15,000 |
| $\quad$ 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 |

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 $31^{\text {st }}$ December, 2018.

Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ December, $2018 \quad$ 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 ${ }^{\text {st }}$ 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 $31^{\text {st }}$ March, 2018 and the balance sheet as on that date.

Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ March, $2018 \quad$ 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 |
| $2016-2017$ |  | By Repairs and renewals | 16,000 |  |
| $2017-2018$ |  | By Special dinner expenses | 4,000 |  |
| $2018-2000$ | 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 |  |  |  | $1,40,000$ |

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 $31^{\text {st }}$ December, 2018.
Dr. Receipts and Payments Account for the year ended 31 ${ }^{\text {st }}$ December, $2018 \quad$ 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 $31^{\text {st }}$ December, 2018 and the balance sheet as on that date.
(Answer: Surplus ₹ 47,000; Opening capital fund: ₹ 75,000;
Closing balance sheet total: ₹ $1,32,000$ ) 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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ACCOUNTS OF PARTNERSHIP FIRMSFUNDAMENTALS

## Contents

### 3.1 Introduction

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## Learning objectives

To enable the students to
$\diamond$ Understand the meaning and features of partnership

- Understand fixed and fluctuating capital methods of maintaining capital accounts of partners
$\diamond$ Understand the calculation and accounting treatment of interest on capital, interest on drawings, remuneration to partners and interest on loan from partners
$\stackrel{\Delta}{ }$ Understand the division of profits among partners

Points to recall

The following points are to be recalled before learning the accounts of partnership firms-fundamentals:
$\stackrel{\rightharpoonup}{ }$ Forms of organisation
$\leftrightarrow$ Accounting cycle


### 3.1 I ntroduction

## 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 $3 / 4$ 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.


## (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 ${ }^{\star}$ <br> To Drawings A/c <br> To Interest on drawings A/c <br> To Profit and loss <br> appropriation A/c <br> (share of loss) <br> To Balance c/d** | xxx | xxx |  | By Balance b/d ${ }^{*}$ <br> By Interest on capital A/c <br> By Salary A/c <br> By Commission A/c <br> By Profit and loss appropriation $\mathrm{A} / \mathrm{c}$ (share of profit) <br> By Balance c/d** | xxx | xxx |
|  |  | xxx | xxx |  |  | xxx | xxx |
|  |  | xxx | xxx |  |  | xxx | xxx |
|  |  |  |  |  |  | xxx | xxx |
|  |  | xxx | xxx |  |  |  |  |
|  |  | xxx | xxx |  |  | xxx | xxx |
|  |  |  |  |  |  | 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 <br> $₹$ |  |
| Capital on 1 st January 2018 | $1,00,000$ | 80,000 |
| Current account on 1 ${ }^{\text {st }}$ January 2018 (Cr.) | 5,000 | 3,000 |
| Additional capital introduced on 1 ${ }^{\text {st }}$ 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 ₹ | $\begin{aligned} & \text { Sumathi } \\ & ₹ \end{aligned}$ | Date | Particulars | Shanthi ₹ | $\begin{aligned} & \text { Sumathi } \\ & ₹ \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | To Balance c/d |  |  | 2018 | By Balance b/d | 1,00,000 | 80,000 |
|  |  |  |  | Jan 1 |  |  |  |
| Dec 31 |  | 1,10,000 | 1,00,000 | June 1 | By Bank <br> (Additional capital) | 10,000 | 20,000 |
|  |  |  |  |  |  |  |  |
|  |  | 1,10,000 | 1,00,000 |  |  | 1,10,000 | 1,00,000 |
|  |  |  |  | $\begin{aligned} & 2019 \\ & \text { Jan } 1 \end{aligned}$ | 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 To Interest on drawings To Balance c/d | 20,000 | 13,000 |  | By Balance b/d <br> By Profit and loss <br> appropriation $\mathrm{A} / \mathrm{c}$ <br> (share of profit) <br> By Interest on capital <br> By Salary <br> By Commission | 5,000 | 3,000 |
|  |  |  |  |  |  |  |  |
|  |  | 500 | 300 |  |  | 10,000 | 8,000 |
|  |  | 9,800 | 4,300 |  |  |  |  |
|  |  |  |  |  |  | 6,300 | 5,400 |
|  |  |  |  |  |  | 9,000 | - |
|  |  |  |  |  |  | - | 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 <br> $₹$ | Naresh <br> $₹$ |
| :--- | ---: | ---: |
| Capital on $1^{\text {st }}$ April 2018 | $4,00,000$ | $6,00,000$ |
| Current account on $1^{\text {st }}$ April 2018 | 20,000 (Cr.) | $15,000(\mathrm{Dr}$.) |
| 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 | $\begin{gathered} \text { Bragathish } \\ ₹ \end{gathered}$ | Naresh ₹ | Date | Particulars | $\begin{gathered} \text { Bragathish } \\ ₹ \end{gathered}$ | 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 | 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 | $\begin{gathered} \text { Bragathish } \\ ₹ \end{gathered}$ | Naresh <br> ₹ | Date | Particulars | Bragathish $₹$ | Naresh <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 $\mathrm{A} / \mathrm{c}$ | 80,000 | 1,20,000 |
|  | To Interest on drawings A/c | 2,000 | 3,000 |  | (share of profit) |  |  |


| To Balance c/d | 90,000 | 1,10,000 | By Interest on capital <br> A/c <br> By Commission A/c <br> By Salary A/c | $\begin{aligned} & 20,000 \\ & 17,000 \end{aligned}$ | $\begin{array}{r} 30,000 \\ - \\ 38,000 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ₹ | ₹ |  |  | ₹ |  |
|  | To Cash / Bank A/c (capital withdrawn) <br> To Drawings A/c <br> To Interest on drawings A/c <br> To Profit and loss appropriation $\mathrm{A} / \mathrm{c}$ (share of loss) <br> To Balance c/d | xxx | xxx |  | By Balance b/d <br> By Cash / Bank A/c <br> (additional capital introduced) <br> By Interest on capital A/c | $\begin{gathered} x x x \\ x x x \end{gathered}$ | xxxxxx |
|  |  |  |  |  |  |  |  |
|  |  | xxx | xxx |  |  |  |  |
|  |  | xxx | xxx |  |  | xxx | xxx |
|  |  | xxx | xxx |  | By Salary A/c <br> By Commission A/c <br> By Profit and loss <br> appropriation $\mathrm{A} / \mathrm{c}$ <br> (share of profit) | xxx <br> xxx | xxx |
|  |  |  |  |  |  |  | xxx |
|  |  | xxx | xxx |  |  | 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 <br> $₹$ | Sevagan ₹ |
| :--- | ---: | ---: |
| Capital on 1st 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 <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| To Drawings A/c | 40,000 | 35,000 | By Balance b/d | 2,00,000 | 1,75,000 |
| To Interest on |  |  | By Profit and loss |  |  |
| drawings A/c | 1,000 | 500 | appropriation $\mathrm{A} / \mathrm{c}$ | 21,000 | 16,500 |
| To Balance c/d | 2,10,000 | 1,69,000 | 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 <br> distinction | Fixed capital method | Fluctuating capital method |
| :---: | :--- | :--- |
| 1. Number of <br> accounts | Two accounts are maintained for <br> each partner, that is, capital account <br> and current account. | Only one account, that is, capital <br> account is maintained for each <br> 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
| Interest on capital A/c <br>  <br>  <br> To Partner's capital / current A/c | Dr. |  | 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Profit and loss appropriation A/c <br> To Interest on capital A/c | Dr. |  | 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 <br> Add: <br> Drawings during the year (if fluctuating capital) <br> 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 $=80,000 \times 5 / 100=₹ 4,000$
Interest on Ramesh's capital $=60,000 \times 5 / 100=₹ 3,000$
Note: Balance of current account will not be considered for calculation of interest on capital.

| Date | Particulars | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 <br> To Interest on capital A/c <br> (Interest on capital closed) | Dr. | 7,000 |  |
| :---: | :--- | :--- | :--- | :--- | :--- |

## 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:

On opening capital for 1 year
On additional capital for 9 months

$$
\begin{array}{ll}
=60,000 \times \frac{6}{100} & =₹ 3,600 \\
=10,000 \times \frac{6}{100} \times \frac{9}{12} & =₹ \frac{450}{₹ 4,050}
\end{array}
$$

Interest on capital

## Interest on Akbar's capital:

On opening capital for 1 year

$$
=40,000 \times \frac{6}{100} \quad=₹ 2,400
$$

$$
=5,000 \times \frac{6}{100} \times \frac{6}{12} \quad=₹ \quad 150
$$

Interest on capital

$$
₹ 2,550
$$

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 1 st 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:

On opening capital for 1 year $\quad=15,000 \cdot \frac{6}{100}=₹ 900$
On additional capital for 6 months $=5,000 \times \frac{6}{100} \times \frac{6}{12}=₹ \quad 150$
Interest on capital

$$
₹ 1,050
$$

## Srinivasan:

On opening capital for 1 year
On additional capital for 4 months
Total interest on capital

$$
\begin{aligned}
& =10,000 \times \frac{6}{100}=₹ 600 \\
& =10,000 \times \frac{6}{100} \times \frac{4}{12}=₹ \frac{200}{₹} 800
\end{aligned}
$$

## 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: | 15,000 | Fixed assets | Current assets |
| Subha | 20,000 |  | 30,000 |
| Sudha | 15,000 |  | 20,000 |
| Current liabilities | 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 <br> $₹$ | Sudha <br> $₹$ |
| :--- | ---: | ---: |
| Capital on 31 ${ }^{\text {st }}$ December 2017 | 15,000 | 20,000 |
| Add: Drawings | 2,500 | 3,500 |
| Less: Profit already credited | 17,500 | 23,500 |
| Capital on 1 ${ }^{\text {st }}$ January 2017 | 7,500 | 7,500 |
|  | 10,000 | 16,000 |

## Calculation of interest on capital:

## Subha:

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

## Sudha:

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 31st 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 $1^{\text {st }}$ 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:

On opening capital for 1 year $\quad=20,000 \times \frac{6}{100}=₹ 1,200$
On additional capital for 6 months $=6,000 \times \frac{6}{100} \times \frac{6}{12}=₹ 180$
Total interest on capital


## Praveena:

On opening capital for 1 year $\quad=25,000 \times \frac{6}{100} \quad=₹ 1,500$
On additional capital for 3 months $=10,000 \times \frac{6}{100} \times \frac{3}{12}=\underline{₹} 150$
Total interest on capital $\quad \underline{\underline{\text { ₹ } 1,650}}$

## 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:

A: $4,00,000 \times \frac{3}{100} \quad=₹ 12,000$
B: $2,00,000 \times \frac{3}{100} \quad=₹ 6,000$
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:

$$
\begin{array}{ll}
\text { A: } 4,00,000 \times \frac{5}{100} & =₹ 20,000 \\
\text { B: } 2,00,000 \times \frac{5}{100} & =₹ 10,000
\end{array}
$$

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 <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Partner's capital/ current A/c <br> To Interest on drawings A/c | Dr. |  | 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Interest on drawings A/c <br> 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:

Interest on drawings $=$ Amount of drawings $\times$ Rate of interest $\times$ 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

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

| Date | Particulars | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 2018 |  |  |  |  |  |
| Dec.31 | Velan's capital A/c <br> To Interest on drawings A/c <br> (Interest on drawings charged) | Dr. |  | 1,500 |  |
| $"$ | Interest on drawings A/c <br> To Profit and loss appropriation A/c <br> (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
Withdrawal on March $1=₹ 6,000 \times \frac{12}{100} \times \frac{10}{12}=$ ₹ 600
Withdrawal on June $1=$ ₹ $4,000 \times \frac{12}{100} \times \frac{7}{12}=₹ 280$
Withdrawal on September 1 = ₹ $5,000 \times \frac{12}{100} \times \frac{4}{12}=$ ₹ 200
Withdrawal on December1 = ₹ $2,000 \times \frac{12}{100} \times \frac{1}{12}=$ ₹ 20
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 $\times$ Rate of interest $\times$ Period of interest
Withdrawal on March $1=₹ 3,000 \times \frac{12}{100} \times \frac{10}{12}=₹ 300$
Withdrawal on June $1=$ ₹ $3,000 \times \frac{12}{100} \times \frac{7}{12}=₹ 210$
Withdrawal on September $1=₹ 3,000 \times \frac{12}{100} \times \frac{4}{12}=₹ 120$
Withdrawal on December $1=₹ 3,000 \times \frac{12}{100} \times \frac{1}{12}=₹ 30$
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

Interest on Drawings

$$
=30,000 \times \frac{10}{100} \times \frac{6}{12}=₹ 1,500
$$

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.

Interest on drawings $=$ Sum of products $x$ 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.
Interest on drawings $=$ Sum of products $x$ 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 <br> $₹$ | Period up to <br> December 31 <br> (months) | Product <br> $₹$ |
| :--- | :---: | :---: | :---: |
| 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 |  |  |  |

Interest on drawings $=$ Sum of product $x$ Rate of interest $\times \frac{1}{12}$

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

## (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:
Interest on drawings $=\left[\begin{array}{c}\text { Total amount of drawings } \\ \text { made during the year }\end{array}\right] \times\left[\begin{array}{c}\text { Rate of interest } \\ \text { per annum }\end{array}\right] \times\left[\frac{\text { Average period }}{12}\right]$
Average period $=\frac{\left[\begin{array}{c}\text { Number of months from } \\ \text { the date of first withdrawal } \\ \text { to the end of the year }\end{array}\right]+\left[\begin{array}{c}\text { Number of months from } \\ \text { the date of last withdrawal } \\ \text { to the end of the year }\end{array}\right]}{2}$
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 |  |  |
| Monthly | At the beginning | In the middle | At the end |
| Quarterly | $\frac{(12+1)}{2}=6.5$ | $\frac{(11.5+0.5)}{2}=6$ | $\frac{(11+0)}{2}=5.5$ |
| Half-yearly | $\frac{(12+3)}{2}=7.5$ | $\frac{(10.5+1.5)}{2}=6$ | $\frac{(9+0)}{2}=4.5$ |

## 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
(i) at the beginning of every month
(ii) in the middle of every month
(iii) 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 $=6.5$
Interest on drawings $\quad=$ Total amount of drawings $\times$ 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 $=6$
Interest on drawings $=$ Total amount of drawings $\times$ Rate of interest $\times \frac{\text { Average period }}{12}$

$$
=₹ 12,000 \times \frac{5}{100} \times \frac{6}{12}=₹ 300
$$

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

Average period $=5.5$
Interest on drawings

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

## 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 $=4,000 \times 4=₹ 16,000$
If drawings are made at the end of every quarter, average period $=4.5$
Interest on drawings $=$ Total amount of drawings $\times$ Rate of interest $\times \frac{\text { Average period }}{12}$

$$
=₹ 16,000 \times \frac{6}{100} \times \frac{4.5}{12}=₹ 360
$$

## 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 $=5,000 \times 2=₹ 10,000$
If drawings are made at the end of every half year, average period $=9$
Interest on drawings $=$ Total amount of drawings $\times$ Rate of interest $\times \frac{\text { Average period }}{12}$

$$
=₹ 10,000 \times \frac{4}{100} \times \frac{9}{12}=₹ 300
$$

### 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 <br> Partner's commission A/c <br> To Partner's capital / current A/c |  | XxX xxx | xxx |

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

| Date | Particulars | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
| Profit and loss appropriation A/c <br>  <br>  <br>  <br>  <br>  <br> To Partner's salary A/c <br> 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 $=2,000 \times 12=₹ 24,000$
Commission to Sudhahar $=₹ 6,000$
Journal entry

| Date | Particulars | L.F. | Dr. <br> $₹$ | Cr. <br> $₹$ |  |
| :--- | :--- | ---: | ---: | :---: | :---: |
|  | Samuel's salary A/c <br> To Samuel's capital A/c <br> (Samuel's salary transferred to his capital account) | Dr. | 24,000 | 24,000 |  |
|  | Sudhahar's commission A/c <br> To Sudhahar's capital A/c <br> (Sudhahar's commission transferred to his capital account) | Dr. |  | 6,000 | 60,000 |
|  | Profit and loss appropriation A/c <br> To Saumel's salary A/c <br> To Sudhahar's commission A/c <br> (Salary and commission account transferred) | 24,000 |  |  |  |

## 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 $=1,10,000-11,000=₹ 99,000$
Sethu's commission $=$ Net profit after Murali's commission $\times \frac{\% \text { of commission }}{(100+\% \text { of commission })}$

$$
=99,000 \times \frac{10}{(100+10)}=₹ 9,000
$$

### 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
\(\left.$$
\begin{array}{|c|c|c|c|c|}\hline \text { Date } & \text { Particulars } & \text { L.F. } & \begin{array}{c}\text { Debit } \\
₹\end{array} & \begin{array}{c}\text { Credit } \\
₹\end{array}
$$ <br>
\hline \& \begin{array}{c}Interest on partner's loan A/c <br>

To Partner's loan A/c\end{array} \& Dr. \& \& \mathrm{xxx}\end{array}\right]\)|  |
| :---: |
|  |

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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Profit and loss A/c <br> To Interest on partner's loan A/c | Dr. |  | 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 <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Profit and loss appropriation A/c <br> To Partner's capital/current <br> A/c | Dr. |  | 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:
(a) Interest on capital is to be allowed at 5\% per annum.
(b) Interest on drawings charged to Arulappan and Nallasamy are ₹ 200 and ₹ 300 respectively.
(c) 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. | $\begin{aligned} & \text { Dr. } \\ & \text { ₹ } \end{aligned}$ | $\begin{gathered} \text { Cr. } \\ \text { F } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2018 \\ \text { Dec. } 31 \end{gathered}$ | Interest on capital A/c <br> To Arulappan's capital A/c <br> To Nallasamy's capital A/c <br> (Interest on capital @ 5\% provided) |  | 1,500 | $\begin{array}{r} 1,000 \\ 500 \end{array}$ |
| " | Profit and loss appropriation A/c <br> To Interest on capital A/c <br> (Interest on capital account closed) |  | 1,500 | 1,500 |
| " | Arulappan's capital A/c Dr. <br> Nallasamy's capital A/c Dr. <br> To Interest on drawings A/c  <br> (Interest on drawings charged)  |  | $\begin{aligned} & 200 \\ & 300 \end{aligned}$ | 500 |
| " | Interest on drawings $\mathrm{A} / \mathrm{c}$ <br> To Profit and loss appropriation A/c (Interest on drawings account closed) |  | 500 | 500 |
| " | Profit and loss appropriation A/c <br> To Arulappan's capital A/c <br> To Nallasamy's capital A/c <br> (Profit transferred) |  | 17,000 | $\begin{array}{r} 13,600 \\ 3,400 \end{array}$ |

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  <br> Nallasamy (1/5) 3,400 $\mathbf{1 7 , 0 0 0}$ |  |  |  |  |
|  |  | 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:
(a) Profits and losses to be shared in the ratio 2:3 as between Durai and Velan.
(b) Partners to be entitled to interest on capital @ $5 \%$ p.a.
(c) Interest on drawings to be charged Durai: ₹ 300 Velan: ₹ 450
(d) Durai to receive a salary of ₹ 5,000 for the year, and
(e) 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 $\mathrm{A} / \mathrm{c}$ : <br> Durai ( $25,000 \times 5 \%$ ) <br> Velan (30,000 x 5\%) <br> To Salary to Durai A/c <br> To Commission to Velan A/c <br> To Partners' capital A/c <br> (profit transferred) <br> Durai ( $11,000 \times 2 / 5$ ) <br> Velan (11,000 x 3/5) | $\begin{aligned} & 4,400 \\ & 6,600 \end{aligned}$ | $\begin{aligned} & 1,250 \\ & 1,500 \\ & 5,000 \\ & 2,000 \\ & \hline \mathbf{1 1 , 0 0 0} \end{aligned}$ | By Profit and loss A/c <br> By Interest on drawings A/c <br> Durai <br> Velan | $\begin{array}{r} 20,000 \\ 300 \\ 450 \end{array}$ |
|  |  | 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
(a) Interest on capital is to be provided @ 6\% p.a.
(b) Rizwan is to get salary of ₹ 50,000 per annum.
(c) Richard is to get $10 \%$ commission on profit (after interest on capital and salary to Rizwan) after charging such commission.
(d) 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) | $1,20,000$ |  |  | $3,00,000$ |
| Rizwan (2/5) | 80,000 | $\mathbf{2 , 0 0 , 0 0 0}$ |  |  |
|  |  | $3,00,000$ |  |  |

## Note:

## Calculation of commission:

Profit before commission $=3,00,000-(50,000+30,000)=₹ 2,20,000$

$$
\begin{aligned}
& \text { Commission }=\text { Net profit before commission } \times \frac{\text { Rate of commission }}{(100+\text { Rate of commission })} \\
& \text { Commission }=2,20,000 \times \frac{10}{110}=₹ 20,000
\end{aligned}
$$

## 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
||||| 110 ||||||
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 moths
(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

| $1(\mathrm{a})$ | 2(a) | 3(d) | 4(c) | 5(a) | 6(b) | 7(c) | 8(c) | 9(b) | 10(d) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 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 ${ }^{\text {st }}$ April, 2018 | 70,000 | 50,000 |
| Current account on $1^{\text {st }}$ 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.))
112 |||||
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 <br> $₹$ | Selvam <br> $₹$ |
| :--- | ---: | ---: |
| Capital on 1 ${ }^{\text {st }}$ January, 2018 | $2,20,000$ | $1,50,000$ |
| Current account on 1 ${ }^{\text {st }}$ January, 2018 | 4,250 (Dr.) | $10,000(\mathrm{Cr}$.) |
| 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: ₹ $\mathbf{1 5 , 0 0 0}$ (Cr.); Selvam: ₹ $\mathbf{1 2 , 0 0 0 ( C r . ) )}$
4. From the following information, prepare capital accounts of partners Padmini and Padma, when their capitals are fluctuating.

| Particulars | Padmini ₹ | Padma <br> ₹ |
| :---: | :---: | :---: |
| Capital on 1 ${ }^{\text {st }}$ 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)
113 ||||||
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)
||||||| 115 ||||||
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: ₹ $\mathbf{1 , 0 0 0}$ )
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: ₹ $\mathbf{8 , 0 0 0}$ 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:
(a) Interest on capital is to be allowed at 6\% per annum.
(b) Interest on drawings charged to Anand and Narayanan are ₹ 1,000 and ₹ 800 respectively.
(c) 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:
(a) Profits and losses to be shared in the ratio 2:1 as between Dinesh and Sugumar.
(b) Partners to be entitled to interest on capital @ $4 \%$ p.a.
(c) Interest on drawings to be charged Dinesh: ₹ 3,600 and Sugumar: ₹ 2,200
(d) Dinesh to receive a salary of ₹ 60,000 for the year, and
(e) 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: ₹ $\mathbf{5 0 , 0 0 0}$; Sugumar: ₹ $\mathbf{2 5 , 0 0 0}$ )
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)

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?

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## UNIT <br> GOODWILL IN <br> 4 PARTNERSHIP ACCOUNTS

| Contents |  |
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| 4.5 | Classification of goodwill <br> 4.6 |
|  | Methods of valuation of goodwill |



The following points are to be recalled before learning goodwill in partnership accounts:
$\diamond$ Meaning and features of partnership firm
$\stackrel{>}{ }$ Meaning of intangible assets


### 4.1 I ntroduction

## 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 $\times$ Number of years of purchase

$$
\text { Average profit }=\frac{\text { Total profit }}{\text { Number of years }}
$$

## I Ilustration 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 $\times$ Number of years of purchase
Average profit $=\frac{\text { Total profit }}{\text { Number of years }}$
$=\frac{4,000+3,000+5,000+4,500+3,500}{5}$
$=\frac{20,000}{5}=₹ 4,000$
Goodwill = Average profit $\times$ Number of years of purchase

$$
=4,000 \times 3=₹ 12,000
$$

## I Ilustration 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 $\times$ Number of years of purchase
Average profit $=\frac{\text { Total profit }}{\text { Number of years }}$
Average profit $=\frac{15,000+17,000-6,000+14,000}{4}$
$=\frac{40,000}{4}=₹ 10,000$
Goodwill = Average profit $\times$ Number of years of purchase

$$
=10,000 \times 5=₹ 50,000
$$

## 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

Average profit $=\frac{\text { Total profit }}{\text { Number of years }}$

$$
\begin{aligned}
& =\frac{40,000+50,000+48,000+46,000}{4} \\
& =\frac{1,84,000}{4}=₹ 46,000
\end{aligned}
$$

Average profit before adjusting fair remuneration of the partner
Less: Fair remuneration of partners
Average profit
₹ 46,000

Goodwill = Average profit $\times$ Number of years of purchase

$$
=40,000 \times 3 \text { = ₹ 1,20,000 }
$$

## I Ilustration 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.
(a) Profits for the years ending 31st December 2016, 2017 and 2018 were ₹ 46,000 , ₹ 44,000 and ₹ 50,000 respectively.
(b) A non-recurring income of ₹ 5,000 is included in the profits of the year 2016.
(c) The closing stock of the year 2017 was overvalued by ₹ 10,000 .

## Solution

Calculation of adjusted profit

| Particulars | $\begin{gathered} 2016 \\ ₹ \end{gathered}$ | $\begin{gathered} 2017 \\ ₹ \end{gathered}$ | $\begin{gathered} 2018 \\ ₹ \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 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

$$
\begin{aligned}
\text { Average profit } & =\frac{\text { Total profit }}{\text { Number of years }} \\
& =\frac{41,000+34,000+60,000}{3} \\
& =\frac{1,35,000}{3}=₹ 45,000 \\
\text { Goodwill } & =\text { Average profit } \times \text { Number of years of purchase } \\
& =45,000 \times 2=₹ 90,000
\end{aligned}
$$

## I llustration 5

The following particulars are available in respect of a business carried on by a partnership firm:
(a) Profits earned: 2016: ₹ 30,000; 2017: ₹ 29,000 and 2018: ₹ 32,000 .
(b) Profit of 2016 includes a non-recurring income of ₹ 3,000 .
(c) Profit of 2017 is reduced by ₹ 2,000 due to stock destroyed by fire.
(d) 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 | $\begin{gathered} 2016 \\ ₹ \end{gathered}$ | $\begin{gathered} 2017 \\ ₹ \end{gathered}$ | $\begin{gathered} 2018 \\ ₹ \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 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 |

Average profit $=\frac{\text { Total profit }}{\text { Number of years }}$

$$
\begin{aligned}
& \text { Average profit }=\frac{27,000+31,000+32,000}{3} \\
& =\frac{90,000}{3}=₹ 30,000
\end{aligned}
$$

| $\quad$ Particulars | $₹$ |
| :--- | ---: |
| Average profit before adjusting insurance premium payable in future | 30,000 |
| Less: Insurance premium payable in future | 5,600 |
| Average profit | 24,400 |

Goodwill = Average profit $\times$ Number of years of purchase

$$
\begin{aligned}
& =24,400 \times 2 \\
& =₹ 48,800
\end{aligned}
$$

## (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.
Goodwill $=$ Weighted average profit $\times$ 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.
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.

## I Ilustration 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 | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :---: | :---: | :---: | :---: |
| 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 <br> (a) <br> ₹ | Weights <br> (b) | Weighted profits $(\mathbf{a} \times \mathbf{b})$ |
| :---: | :---: | :---: | :---: |
| 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 |
| Total |  | 10 | 2,48,000 |

$$
\begin{aligned}
\text { Weighted average profit } & =\frac{\text { Total of weighted profits }}{\text { Total of weights }} \\
& =\frac{2,48,000}{10}=₹ 24,800 \\
\text { Goodwill } & =\text { Weighted average profit } \times \text { Number of years of purchase } \\
& =24,800 \times 3=₹ 74,400
\end{aligned}
$$

### 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.
Super profit = Average profit - 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.
Normal profit $\quad=$ Capital employed $\times$ Normal rate of return
Capital employed = Fixed assets + Current assets - 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

Normal profit $=$ Capital employed $\times$ Normal rate of return

$$
=2,00,000 \times 15 \%=\text { ₹ } 30,000
$$

Super profit $\quad=$ Average profit - Normal profit

$$
=42,000-30,000
$$

$$
\text { = ₹ } 12,000
$$

Goodwill $=$ Super profit $\times$ Number of years of purchase

$$
=12,000 \times 3
$$

$$
=\text { ₹ } 36,000
$$

## I Ilustration 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

Average profit $=\frac{\text { Total profit }}{\text { Number of years }}$
Average profit $=\frac{30,000+32,000+35,000+37,000+40,000}{5}$
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 |

Normal profit $=$ Capital employed $\times$ Normal rate of return

$$
\begin{aligned}
& =1,20,000 \times 20 \% \\
& =\text { ₹ } 24,000
\end{aligned}
$$

Super profit = Average profit - Normal profit

$$
=32,000-24,000
$$

$$
=\text { ₹ } 8,000
$$

Goodwill $=$ Super profit $\times$ Number of years of purchase

$$
=8,000 \times 5
$$

$$
\text { = ₹ } 40,000
$$

## (b) Annuity method

Under this method, value of goodwill is calculated by multiplying the super profit with the present value of annuity.

Goodwill $=$ Super profit $\times$ 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:

$$
\begin{aligned}
& \text { Annuity factor }=\frac{(1+i)^{n}-1}{i(1+i)^{\mathrm{n}}} \\
& \text { where, } \mathrm{i}=\text { interest rate } \\
& \qquad \mathrm{n}
\end{aligned}
$$

## I Ilustration 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

$$
\begin{aligned}
\text { Average profit } & =\frac{\text { Total profit }}{\text { Number of years }} \\
& =\frac{13,000+15,000+17,000}{3} \\
& =\frac{45,000}{3} \\
& =₹ 15,000
\end{aligned}
$$

Normal profit $=$ Capital employed $\times$ Normal rate of return

$$
\begin{aligned}
& =50,000 \times 10 \% \\
& =₹ 5,000 \\
\text { Super profit } & =\text { Average profit }- \text { Normal profit } \\
& =15,000-5,000 \\
& =₹ 10,000 \\
\text { Goodwill } & =\text { Super profit } \times \text { Value of annuity } \\
& =10,000 \times 2.4868=₹ 24,868
\end{aligned}
$$

## (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.

$$
\text { Goodwill }=\frac{\text { Super profit }}{\text { Normal rate of return }} \times 100
$$

## I llustration 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

$$
\begin{aligned}
\text { Average profit } & =\frac{\text { Total profit }}{\text { Number of years }} \\
& =\frac{62,000+61,000+63,000}{3} \\
& =\frac{1,86,000}{3} \\
& =₹ 62,000 \\
\text { Normal profit } & =\text { Capital employed } \times \text { Normal rate of return } \\
& =4,00,000 \times 10 \% \\
& =₹ 40,000 \\
\text { Super profit } & =\text { Average profit }- \text { Normal profit } \\
& =62,000-40,000 \\
& =₹ 22,000
\end{aligned}
$$

Goodwill $=\frac{\text { Super profit }}{\text { Normal rate of return }} \times 100$

$$
\begin{aligned}
& =\frac{22,000}{10} \times 100 \\
& =\text { ₹ } 2,20,000
\end{aligned}
$$

### 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.

Goodwill $=$ Total capitalised value of the business - 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.

Capitalised value of the business $=\frac{\text { Average profit }}{\text { Normal rate of return }} \times 100$
Actual capital employed $=$ Fixed assets (excluding goodwill) + Current assets - Current liabilities

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## I Ilustration 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

Total capitalised value of the business $=\frac{\text { Average profit }}{\text { Normal rate of return }} \times 100$

$$
=\frac{60,000}{10} \times 100
$$

$$
=\text { ₹ } 6,00,000
$$

Goodwill = Total capitalised value of the business - Capital employed
$=6,00,000-4,50,000$
= ₹ $1,50,000$

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 $\times$ Years of purchase
5. Identify the incorrect pair
(a) Goodwill under Average profit method - Average profit $\times$ Number of years of purchase
(b) Goodwill under Super profit method - Super profit $\times$ Number of years of purchase
(c) Goodwill under Annuity method - Average profit $\times$ Present value annuity factor
(d) Goodwill under Weighted average - Weighted average profit $\times$ Number of years of profit method 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) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 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: ₹ $\mathbf{3 0 , 0 0 0 )}$

## 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: ₹ $\mathbf{1 2 , 0 0 0}$; 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 <br> $₹$ |
| :---: | :---: | :---: |
| 2015 | Profit | 5,000 |
| 2016 | Profit | 8,000 |
| 2017 | Loss | 3,000 |
| 2018 | Profit | 6,000 |

(Answer: Average profit: ₹ $\mathbf{4 , 0 0 0}$; Goodwill: ₹ $\mathbf{1 2 , 0 0 0 )}$
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: ₹ $\mathbf{1 0 , 0 0 0 ;}$ Goodwill: ₹ $\mathbf{3 0 , 0 0 0}$ )
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: ₹ $\mathbf{1 , 6 0 , 0 0 0}$; 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 <br> $₹$ | 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: ₹ $\mathbf{8 , 0 0 0}$; Goodwill: ₹ $\mathbf{1 6 , 0 0 0 )}$

## 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: ₹ $\mathbf{1 0 , 0 0 0}$; 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 ₹ $1,50,000$

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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## ADMISSION OF A PARTNER

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|  |  |

To enable the students to

- Understand the accounting treatment at the time of admission of a partner
$\diamond$ Prepare revaluation account, capital accounts and balance sheet of the firm after admission of a partner.

at the time of admission of a partner


The following points are to be recalled before learning admission of a partner:

- Meaning and features of partnership firm
$\stackrel{\rightharpoonup}{ }$ Partnership deed
$\diamond$ Partners' capital accounts
- Valuation of goodwill


## Key terms to know

$\stackrel{\rightharpoonup}{ }$ Admission of a partner
Sacrificing ratio
$\stackrel{\text { Revaluation account }}{ }$


### 5.1 I ntroduction

## 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 <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash or Bank A/c <br> Assets A/c <br> To Partner's capital A/c | $\begin{aligned} & \mathrm{Dr} . \\ & \mathrm{Dr} . \end{aligned}$ |  | $\begin{aligned} & \mathrm{xxx} \\ & \mathrm{xxx} \end{aligned}$ | 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. Incase 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 <br> $₹$ | Credit <br> $₹$ |  |
| :--- | :--- | ---: | :---: | :---: | :---: |
|  | 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
$\left.\begin{array}{|c|c|c|c|c|}\hline \text { Date } & \text { Particulars } & \text { L.F. } & \begin{array}{c}\text { Debit } \\ ₹\end{array} & \begin{array}{c}\text { Credit } \\ ₹\end{array} \\ \hline & \begin{array}{c}\text { Old partner's capital / current A/c } \\ \text { ToProfit and loss A/c (in old ratio) }\end{array} & \text { Dr. } & & \mathrm{xxx}\end{array}\right)$


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.

## I Ilustration 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 <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :--- | :--- | :---: | :---: | :---: |
| 2017 | Reserve fund A/c | Dr. |  | 50,000 |  |
| March 31 | To Mala's capital A/c $\quad(50,000 \times 3 / 5)$ |  |  | 30,000 |  |
|  | To Vimala's capital A/c | $(50,000 \times 2 / 5)$ |  |  | 20,000 |
|  | (Reserve fund transferred to old partners' capital |  |  |  |  |
| account in the old profit sharing ratio) |  |  |  |  |  |

## I Ilustration 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 <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 2019 | Kavitha's capital A/c | Dr. |  | 40,000 |  |
| January 1 | Radha's capital A/c <br> To Profit and loss a/c |  | 30,000 |  |  |
|  | (Accumulated loss transferred to old partners' <br> capital account in the old profit sharing ratio) |  |  | 70,000 |  |

## I Ilustration 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | ---: | ---: | ---: | :---: |
| 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 | $(40,000 \times 3 / 5)$ |  |  |  |
|  | To Arockia Das's capital A/c | $(40,000 \times 2 / 5)$ |  |  | 24,000 |
|  | (Accumulated profit and reserve transferred to old |  |  |  | 16,000 |
|  | 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 <br> $₹$ | Credit <br> $₹$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | 1. For increase in the value of asset <br> Concerned asset A/c <br> To Revaluation A/c | Dr. |  | xxx |  |
|  | 2. For decrease in the value of asset <br> Revaluation A/c <br> To Concerned asset A/c | Dr. |  | xxx | xxx |
|  | 3. For increase in the amount of liabilities <br> Revaluation A/c <br> To Concerned liability A/c | Dr. |  | 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.
(a) The value of building is increased by ₹ 15,000 .
(b) The value of the machinery is decreased by ₹ 4,000 .
(c) Provision for doubtful debt is made for ₹ 1,000 .

## Solution

Journal entries

| Date | Particulars | L.F. | Debit <br> ₹ | $\begin{gathered} \text { Credit } \\ \text { ₹ } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Buildings A/c <br> To Revaluation A/c (Appreciation in value of buildings recorded) |  | 15,000 | 15,000 |
|  | Revaluation $\mathrm{A} / \mathrm{c}$ <br> To Machinery A/c <br> To Provision for doubtful debts A/c <br> (Decrease in assets recorded and provision made) |  | 5, 000 | $\begin{aligned} & 4,000 \\ & 1,000 \end{aligned}$ |
|  | Revaluation A/c <br> To Rajesh's capital A/c <br> To Ramesh's capital A/c <br> (Profit on revaluation transferred) |  | 10,000 | $\begin{aligned} & 6,000 \\ & 4,000 \end{aligned}$ |

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 <br> transferred to |  |  |  |  |
| Rajesh's capital A/c (3/5) | 6,000 |  |  |  |
| Ramesh's capital A/c (2/5) | 4,000 | $\mathbf{1 0 , 0 0 0}$ |  | 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:
(i) Increase the value of stock by ₹ 5,000
(ii) Bring into record investment of ₹ 7,000 which had not been recorded in the books of the firm.
(iii) Reduce the value of office equipment by ₹ 10,000
(iv) 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 ₹ | $\underset{₹}{\text { Credit }}$ |
| :---: | :---: | :---: | :---: | :---: |
| 2017 | Stock A/c Dr. |  | 5,000 | 12,000 |
| April 1 | Investment A/c Dr. |  | 7,000 |  |
|  | To Revaluation A/c <br> (Increase in the value of stock and unrecorded investment accounted) |  |  |  |
|  |  |  |  |  |
| " | Revaluation A/c <br> Dr. |  | 19,500 |  |
|  | To Office equipment $\mathrm{A} / \mathrm{c}$ |  |  | 10,000 |
|  | To Outstanding wages $\mathrm{A} / \mathrm{c}$ |  |  | 9,500 |
|  | (Reduction in the value of office equipment and provision of outstanding wages recorded) |  |  |  |
| " | Sriram's capital A/c Dr. |  | 5,000 | 7,500 |
|  | Raj's capital A/c Dr. |  | 2,500 |  |
|  | To Revaluation A/c |  |  |  |
|  | (Loss on revaluation transferred) |  |  |  |

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 |

## I Ilustration 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: <br> Raghu <br> Sam <br> Sundry creditors | $\begin{aligned} & 40,000 \\ & 30,000 \end{aligned}$ | $\begin{aligned} & 70,000 \\ & 30,000 \end{aligned}$ | Machinery |  | 30,000 |
|  |  |  | Furniture |  | 10,000 |
|  |  |  | Stock |  | 10,000 |
|  |  |  | Debtors | 21,000 |  |
|  |  |  | Less: Provision for |  |  |
|  |  |  | Bank ${ }^{\text {doubtful debts }}$ | 1,000 | 20,000 |
|  |  |  |  |  | 30,000 |
|  |  | 1,00,000 |  |  | 1,00,000 |

Prakash is admitted on 1.4.2017 subject to the following conditions:
(a) He has to bring a capital of ₹ 10,000
(b) Machinery is valued at ₹ 24,000
(c) Furniture to be depreciated by ₹ 3,000
(d) Provision for doubtful debts should be increased to ₹ 3,000
(e) 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. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\begin{gathered} \text { Credit } \\ \text { ₹ } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2017 \\ \text { April } 1 \end{gathered}$ | Bank A/c <br> To Prakash's capital A.c (Capital brought by Prakash) |  | 10,000 | 10,000 |
| " | Revaluation A/c <br> To Machinery A/c <br> To Furniture $\mathrm{A} / \mathrm{c}$ <br> To Provision for doubtful debts A/c <br> (Depreciation on machinery and furniture and provision made for doubtful debts adjusted) |  | 11,000 | $\begin{aligned} & 6,000 \\ & 3,000 \\ & 2,000 \end{aligned}$ |


| $"$, | Trade receivables A/c <br> To Revaluation A/c <br> (Unrecorded trade receivables recorded) | 1,000 |  |  |
| :---: | :--- | ---: | ---: | ---: |
| $"$, | Raghu's capital A/c <br> Sam's capital A/c <br> To Revaluation A/c <br> (Loss on revaluation transferred to capital accounts) | Dr. | 6,000 | 4,000 |

Dr.
Revaluation Account
Cr.

| Particulars | ₹ | Particulars | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: |
| To Machinery <br> To Furniture <br> To Provision for bad debts | $\begin{aligned} & 6,000 \\ & 3,000 \\ & 2,000 \end{aligned}$ | By Trade receivables A/c <br> By Loss on revaluation transferred to <br> Raghu's capital A/c (3/5) <br> Sam's capital A/c (2/5) | $\begin{aligned} & 6,000 \\ & 4,000 \end{aligned}$ | $\begin{gathered} 1,000 \\ \mathbf{1 0 , 0 0 0} \end{gathered}$ |
|  | 11,000 |  |  | 11,000 |

Dr.
Capital Account
Cr.

| Date | Particulars | Ragu $₹$ | $\begin{gathered} \text { Sam } \\ ₹ \end{gathered}$ | Prakash ₹ | Date | Particulars | Ragu ₹ | $\begin{gathered} \text { Sam } \\ ₹ \end{gathered}$ | Prakash |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | To Revaluation A/c To Balance c/d | $\begin{array}{r} 6,000 \\ 34,000 \end{array}$ | $\begin{array}{r} 4,000 \\ \mathbf{2 6 , 0 0 0} \end{array}$ | 10,000 |  | By Balance b/d <br> By Bank | 40,000 | 30,000 | 10,000 |
|  |  | 40,000 | 30,000 | 10,000 |  |  | 40,000 | 30,000 | 10,000 |
|  |  |  |  |  |  | By Balance b/d | 34,000 | 26,000 | 10,000 |

## I Ilustration 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:
(a) Stock to be depreciated by ₹ 3,000
(b) Provision for doubtful debts to be created for ₹ 2,000 .
(c) 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 | $\mathbf{5 , 0 0 0}$ |  | 10,000 |
|  |  | 10,000 |  |  |

Dr.
Capital Account
Cr.

| Particulars | Anand <br> ₹ | $\begin{gathered} \text { Balu } \\ \text { ₹ } \end{gathered}$ | Chandru ₹ | Particulars | Anand ₹ | $\begin{gathered} \text { Balu } \\ \text { ₹ } \end{gathered}$ | Chandru <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 $\mathrm{A} / \mathrm{c}$ | 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.

> Share sacrificed $=$ Old share - New share
> Sacrificing ratio $=$ 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

## I Ilustration 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

Old ratio of Anbu and Raju

$$
\begin{aligned}
& =3: 2 \text { that is, } \frac{3}{5}: \frac{2}{5} \\
& =5: 3: 2 \text { that is, } \frac{5}{10}: \frac{3}{10}: \frac{2}{10}
\end{aligned}
$$

Share sacrificed
= Old share - New share

Anbu

$$
=\frac{3}{5}-\frac{5}{10}=\frac{6-5}{10}=\frac{1}{10}
$$

$$
=\frac{2}{5}-\frac{3}{10}=\frac{4-3}{10}=\frac{1}{10}
$$

Sacrificing ratio of Anbu and Raju is $\frac{1}{10}: \frac{1}{10}$ 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 |

## I Ilustration 9

Hari and Saleem are partners sharing profits and losses in the ratio of 5:3. They admit Joel for $1 / 8$ 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
Hari $\quad=\frac{1}{8}$

Saleem $\quad=0$
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
Hari
$=\frac{5}{8}-\frac{1}{8}=\frac{5-1}{8}=\frac{4}{8}$
Saleem

$$
=\frac{3}{8}
$$

Share of new partner

$$
\text { Joel } \quad=\frac{1}{8}
$$

New profit sharing ratio of Hari, Saleem and Joel is $\frac{4}{8}: \frac{3}{8}: \frac{1}{8}$ that is, $4: 3: 1$

## I llustration 10

Ravi and Kumar share profits and losses in the ratio of 7:3. Christy is admitted as a new partner with $3 / 7$ share which he acquires $2 / 7$ from Ravi and $1 / 7$ from Kumar. Calculate the new profit sharing ratio and sacrificing ratio.

## Solution

Computation of sacrificing ratio and new profit sharing ratio
Shares sacrificed $\quad=\frac{2}{7}, \frac{1}{7}$
Sacrificing ratio of Ravi and Kumar is 2:1
Old profit sharing ratio $\quad=7: 3$ or $\frac{7}{10}: \frac{3}{10}$
New share of old partners = Old share - Share sacrificed

$$
\begin{array}{ll}
\text { Ravi } & =\frac{7}{10}-\frac{2}{7}=\frac{49-20}{70}=\frac{29}{70} \\
\text { Kumar } & =\frac{3}{10}-\frac{1}{7}=\frac{21-10}{70}=\frac{11}{70}
\end{array}
$$

Share of new partner

$$
\text { Christy } \quad=\frac{3}{7}
$$

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 $=\frac{29}{70}: \frac{11}{70}: \frac{30}{70}=29: 11: 30$

## I Ilustration 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 $1 / 5$ from Hameed and $1 / 5$ 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 $\quad=$ 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 |

## I Ilustration 12

Suresh and Dinesh are partners sharing profits in the ratio of 3:2. They admit Ramesh as a new partner. Suresh surrenders $1 / 5$ of his share in favour of Ramesh. Dinesh surrenders $2 / 5$ 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
Suresh $=\frac{3}{5} \times \frac{1}{5}=\frac{3}{25}$
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
Suresh $\quad=\frac{3}{5}-\frac{3}{25}=\frac{15-3}{25}=\frac{12}{25}$
Dinesh $\quad=\frac{2}{5}-\frac{4}{25}=\frac{10-4}{25}=\frac{6}{25}$
Share of new partner = Sum of shares sacrificed by Suresh and Dinesh

$$
\text { Ramesh } \quad=\frac{3}{25}+\frac{4}{25}=\frac{3+4}{25}=\frac{7}{25}
$$

New profit sharing ratio of Suresh, Dinesh and Ramesh $=\frac{12}{25}: \frac{6}{25}: \frac{7}{25}$ that is, 12:6:7

## I Ilustration 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 $2 / 5$ of his share and Nisha surrenders $2 / 5$ 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
Prasanth

$$
=\frac{3}{5} \times \frac{2}{5}=\frac{6}{25}
$$

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
Prasanth

$$
=\frac{3}{5}-\frac{6}{25}=\frac{15-6}{25}=\frac{9}{25}
$$

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
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:

| New share of old partner | $=$ Old share - Share sacrificed |
| :--- | :--- |
| Share sacrificed | $=$ New partner's share $\times$ Proportion of share sacrificed |

## I Ilustration 14

Ramesh and Raju are partners sharing profits in the ratio of 2:1. They admit Ranjan into partnership with $1 / 4$ 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

$$
\text { Ranjan's share } \quad=\frac{1}{4}
$$

Old ratio

$$
=2: 1 \text { that is, } \frac{2}{3}: \frac{1}{3}
$$

Proportion of share sacrificed $\quad=3: 2$ that is, $\frac{3}{5}: \frac{2}{5}$
Share sacrificed $=$ New partner's share $\times$ Proportion of share sacrificed

Ramesh

$$
=\frac{1}{4} \times \frac{3}{5}=\frac{3}{20}
$$

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
Ramesh

$$
=\frac{2}{3}-\frac{3}{20}=\frac{40-9}{60}=\frac{31}{60}
$$

## Raju

$$
=\frac{1}{3}-\frac{2}{20}=\frac{20-6}{60}=\frac{14}{60}
$$

Share of new partner

## Ranjan <br> $$
=\frac{1}{4}
$$

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 $=\frac{31}{60}: \frac{14}{60}: \frac{15}{60}=31: 14: 15$

## I Ilustration 15

Mahesh and Dhanush are partners sharing profits and losses in the ratio of 2:1. Arun is admitted for $1 / 4$ 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
Arun's share $\quad=\frac{1}{4}$
Proportion of share sacrificed $\quad=1: 1$ (equally) i.e. $\frac{1}{2}: \frac{1}{2}$
Share sacrificed

$$
=\text { New partner's share } \times \text { Proportion of share sacrificed }
$$

Mahesh
$=\frac{1}{4} \times \frac{1}{2}=\frac{1}{8}$
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
Mahesh

$$
=\frac{2}{3}-\frac{1}{8}=\frac{16-3}{24}=\frac{13}{24}
$$

Dhanush

$$
=\frac{1}{3}-\frac{1}{8}=\frac{8-3}{24}=\frac{5}{24}
$$

Share of new partner
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

$$
=\frac{13}{24}: \frac{5}{24}: \frac{6}{24} \text { that is, 13:5:6. }
$$

(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 |

## I Ilustration 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

$$
=\frac{1}{4}
$$

$$
\text { Remaining share } \quad=1-\frac{1}{4}=\frac{4-1}{4}
$$

$$
=\frac{3}{4}
$$

New share of old partners = Remaining share $\times$ Old share
Vimal
$=\frac{3}{4} \times \frac{2}{3}=\frac{6}{12}$
Athi

$$
=\frac{3}{4} \times \frac{1}{3}=\frac{3}{12}
$$

Share of new partner
Jeyam

$$
=\frac{1}{4}
$$

In order to equalise the denominator, multiply and divide by 3
Jeyam's share $\quad=\frac{1}{4} \times \frac{3}{3}=\frac{3}{12}$
New profit sharing ratio of Vimal, Athi and Jeyam $=\frac{6}{12}: \frac{3}{12}: \frac{3}{12}$ that is, 2:1:1

## I Ilustration 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
Remaining share $\quad=1-\frac{1}{5}=\frac{5-1}{5}$
$=\frac{4}{5}$
New share of old partners $=$ Remaining share $\times$ Old share

$$
\begin{array}{ll}
\text { Anil } & =\frac{4}{5} \times \frac{4}{10}=\frac{16}{50} \\
\text { Sunil } & =\frac{4}{5} \times \frac{3}{10}=\frac{12}{50} \\
\text { Hari } & =\frac{4}{5} \times \frac{3}{10}=\frac{12}{50}
\end{array}
$$

Share of new partner

$$
\text { Raja } \quad=\frac{1}{5}
$$

In order to equalise the denominator, multiply and divide Raja's share by 10
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 disccussed 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Cash / Bank A/c <br> To Old partners' capital / current A/c <br> (in sacrificing ratio) | Dr. | xxx |  |

(ii) For the goodwill brought in kind (in the form of assets) credited to old partners' capital account

| Date | Particulars | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | :---: | :---: | :---: | :---: |
|  | Respective Asset A/c <br> To Old partners' capital / current A/c <br> (in sacrificing ratio) | Dr. | xxx |  |

(iii) For withdrawal of cash received for goodwill by the old partners

| Date | Particulars | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Old partners' capital / current A/c <br> To Cash / Bank A/c | Dr. |  | xxx |
| x |  |  |  |  |

## I Ilustration 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 $3 / 8$ 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 $₹$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2019 \\ \text { January } 1 \end{gathered}$ | Bank A/c <br> To Amudha's capital A/c (5/8) <br> To Bhuvana's capital A/c (3/8) <br> (Cash brought for goodwill credited to Amudha and Bhuvana in sacrificing ratio) |  | 8,000 | $\begin{aligned} & 5,000 \\ & 3,000 \end{aligned}$ |
| " | Amudha's capital A/c Dr. <br> Bhuvana's capital A/c Dr. <br> To Bank A/c  <br> (Amount withdrawn by the partners)  |  | $\begin{aligned} & \hline 5,000 \\ & 3,000 \end{aligned}$ | 8,000 |

## I Ilustration 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. | $\underset{₹}{\text { Debit }}$ | Credit ₹ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c <br> To Arun's capital A/c <br> To Babu's capital A/c <br> To Charles's capital A/c <br> (Cash brought for goodwill credited to old partners' capital account in sacrificing ratio) |  | 9,000 | $\begin{aligned} & 3,000 \\ & 3,000 \\ & 3,000 \end{aligned}$ |


|  | 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) |  |  |  |  |

## I Ilustration 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
Vasu $=\frac{3}{5}-\frac{3}{8}=\frac{24-15}{40}=\frac{9}{40}$

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. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\underset{₹}{\text { Credit }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c <br> To Vasu's current A/c (9/10) <br> To Devi's current A/c (1/10) <br> (Cash brought for goodwill credited to old partners' capital account in sacrificing ratio) |  | 3,000 | 2,700 300 |

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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | New partners' capital A/c <br> To Old partners' capital / current A/c <br> (in sacrificing ratio) | Dr. | xxx |  |

## I llustration 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 $5: 1$.
Tharun's share of goodwill $=27,000 \times \frac{2}{9}=₹ 6,000$
Journal entry

| Date | Particulars | L.F. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\begin{gathered} \text { Credit } \\ \text { ₹ } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Tharun's capital A/c <br> To Ashok's capital A/c (5/6) <br> To Mumtaj's capital A/c (1/6) <br> (Tharun's share of goodwill credited to the old partners' capital account in the sacrificing ratio) |  | 6,000 | $\begin{aligned} & 5,000 \\ & 1,000 \end{aligned}$ |

## 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 <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
|  | Cash / Bank A/c | Dr. |  | xxx |  |
|  | New partners' capital A/c <br> To Old partners' capital / current A/c <br> (in sacrificing ratio) | Dr. |  | xxx |  |

## I Ilustration 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.

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## Solution

## Calculation of sacrificing ratio

$$
\begin{array}{ll}
\text { Sacrificing ratio } & =\text { Old share }- \text { New share } \\
\text { Aravind } & =\frac{3}{5}-\frac{1}{3}=\frac{9-5}{15}=\frac{4}{15} \\
\text { Balaji } & =\frac{2}{5}-\frac{1}{3}=\frac{6-5}{15}=\frac{1}{15}
\end{array}
$$

Therefore, sacrificing ratio is $4: 1$

## Journal entry

| Date | Particulars | L.F. | $\underset{₹}{\text { Debit }}$ | 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | :---: | :---: | :---: | :---: |
|  | Old partners' capital / current A/c (in old ratio) <br> To Goodwill A/c <br> (Existing goodwill written off) | Dr. | xxx |  |

## I Ilustration 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |  |  |  | 35,000 |
|  | (Existing goodwill written off) |  |  |  |  |

(ii) To write off ₹ 21,000 of the existing goodwill

Journal entry

| Date | Particulars | L.F. | $\begin{array}{c}\text { Debit } \\ ₹\end{array}$ | $\begin{array}{c}\text { Credit } \\ ₹\end{array}$ |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| 2018 | Sathish's capital A/c | $(21,000 \times 4 / 7)$ | Dr. |  | 12,000 |
| April 1 | Sudhan's capital A/c | $(21,000 \times 3 / 7)$ | Dr. |  | 9,000 |$]$



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

## I Ilustration 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.
(i) Suriya brings ₹ 10,000 as capital for $1 / 4$ share of profit.
(ii) Stock to be depreciated by $10 \%$
(iii)Debtors to be revalued at ₹ 7,500 .
(iv) Furniture to be revalued at ₹ 40,000 .
(v) 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 |  |  | 15,000 |
| Ranjit (2/5) | 2,400 | $\mathbf{6 , 0 0 0}$ |  |  |
|  |  | 15,000 |  |  |

Dr.
Capital Account
Cr.

| Particulars | Vetri ₹ | Ranjit ₹ | Suriya ₹ | Particulars | Vetri ₹ | Ranjit <br> ₹ | Suriya <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Profit and loss A/c To Balance c/d |  | 4,000 <br> 20,400 | 10,000 | By Balance b/d <br> By Reserve fund $\mathrm{A} / \mathrm{c}$ <br> By Revaluation A/c <br> By Cash A/c | 30,000 | 20,000 | $10,000$ |
|  |  |  |  |  | 3,000 | 2,000 |  |
|  |  |  |  |  | 3,600 | 2,400 |  |
|  |  |  |  |  | - |  |  |
|  | 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


## I Ilustration 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 Rekha's capital A/c (3/4) Mary's capital A/c (1/4) |  |  |
| To Stock A/c | 2,000 |  | 7,500 |  |
| To Provision for bad debts A/c | 3,000 |  | 2,500 | 10,000 |
|  | 10,000 |  |  | 10,000 |

Dr.
Capital Account
Cr.


Balance Sheet as on 1st April 2018

| Liabilities | ₹ | ₹ | Assets | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital accounts: | $\begin{aligned} & 84,000 \\ & 40,000 \end{aligned}$ | $\begin{array}{r} 1,40,000 \\ 20,000 \end{array}$ | Buildings <br> Less: Depreciation | $\begin{array}{r} 50,000 \\ 5,000 \end{array}$ | 45,000 |
| Rekha |  |  |  |  |  |
| Mary |  |  | Stock | 8,000 |  |
| Kavitha | 16,000 |  | Less: Decrease | 2,000 | 6,000 |
| Sundry creditors | $20,000$ |  | Sundry debtors <br> Less: Provision for doubtful debts <br> Bank (32,000+20,000) | 60,000 |  |
|  |  |  |  | 3,000 | 57,000 |
|  |  |  |  |  | 52,000 |
|  |  | 1,60,000 | Bank (32,000+20,000) |  | 1,60,000 |

## I Ilustration 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 |  |  | By Machinery A/c | 20,000 |
| Ameer's capital A/c (3/5) | 13,200 |  |  |  |
| Raja's capital A/c (2/5) | 8,800 | $\mathbf{2 2 , 0 0 0}$ |  |  |
|  |  | 24,000 |  | 24,000 |

Dr.
Capital Account
Cr.

| Particulars | Ameer <br> ₹ | Raja ₹ | Rohit <br> ₹ | Particulars | Ameer <br> ₹ | Raja <br> ₹ | Rohit ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Balance c/d | 1,08,200 | 88,800 | 30,000 | By Balance b/d <br> By Bank A/c <br> By Reserve fund $\mathrm{A} / \mathrm{c}$ <br> By Revaluation A/c <br> By Bank A/c* <br> (share of goodwill) | 80,000 | 70,000 |  |
|  |  |  |  |  |  |  | 30,000 |
|  |  |  |  |  | 9,000 | 6,000 |  |
|  |  |  |  |  | 13,200 | 8,800 | - |
|  |  |  |  |  | 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 | $\mathbf{6 0 , 0 0 0}$ |
|  | To Rohit's capital A/c | 30,000 |  |  |  |
|  | To Ameer's capital A/c | 6,000 |  |  |  |
|  | To Raja's capital A/c | 4,000 |  |  |  |
|  |  | 60,000 |  |  | 60,000 |

Balance Sheet as on 1st January 2019

| Liabilities | ₹ | ₹ | Assets | $₹$ | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital accounts: |  | $\begin{array}{r} 2,27,000 \\ 35,000 \end{array}$ | Machinery | 60,000 |  |
| Ameer | 1,08,200 |  | Add: Appreciation | 20,000 | 80,000 |
| Raja | 88,800 |  | Furniture | 40,000 |  |
| Rohit | 30,000 |  | Less: Depreciation | 2,000 | 38,000 |
| Creditors |  |  | Debtors <br> Stock <br> Add: Appreciation <br> Prepaid insurance <br> Cash at bank |  | 30,000 |
|  |  |  |  | 10,000 |  |
|  |  |  |  | 4,000 | 14,000 |
|  |  |  |  |  | 40,000 |
|  |  |  |  |  | 60,000 |
|  |  | 2,62,000 |  |  | 2,62,000 |

## I Ilustration 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

$$
=5: 3: 2 \text { i.e. } \frac{5}{10}: \frac{3}{10}: \frac{2}{10}
$$

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.

| Particulars | Veena <br> ₹ | $\begin{gathered} \text { Pearl } \\ ₹ \end{gathered}$ | $\begin{gathered} \text { Deri } \\ \text { ₹ } \end{gathered}$ | Particulars | Veena <br> ₹ | $\begin{gathered} \text { Pearl } \\ ₹ \end{gathered}$ | $\begin{gathered} \text { Deri } \\ \text { ₹ } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 $\mathrm{A} / \mathrm{c}$ $(10,000-1,000)$ | 6,000 | 3,000 |  |
|  |  |  |  | By Revaluation $\mathrm{A} / \mathrm{c}$ | 6,000 | 3,000 |  |
|  |  |  |  | By Bank A/c* <br> (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 |

[^0]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


## 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 $\mathrm{A} / \mathrm{c}$ is a

(a) Real A/c
(b) Nominal A/c
(c) Personal A/c
(d) Impersonal $\mathrm{A} / \mathrm{c}$
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
(a) Generally mutual rights of the partners change
(b) The profits and losses of the previous years are distributed to the old partners
(c) The firm is reconstituted under a new agreement
(d) 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

(i) Sacrificing ratio
(ii) Old profit sharing ratio
(iii) Revaluation Account
(iv) Capital Account

Codes:
(i) (ii) (iii) (iv)
(a) $\begin{array}{llll}1 & 2 & 3 & 4\end{array}$
(b) $\begin{array}{llll}3 & 2 & 4 & 1\end{array}$
(c) $\begin{array}{lllll}4 & 3 & 2 & 1\end{array}$
(d) $\begin{array}{lllll}3 & 1 & 2 & 4\end{array}$
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 $1 / 5$ 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) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 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 |  |  |

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: ₹ $\mathbf{5 0 , 0 0 0}$ )
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: <br> Sai | $\begin{aligned} & 48,000 \\ & 40,000 \end{aligned}$ | 88,000 | Building | $\begin{array}{r} 40,000 \\ 3,000 \end{array}$ | 34,000 |
|  |  |  | Furniture |  | 6,000 |
| Shankar <br> Creditors <br> Outstanding wages |  |  | Investment |  | 20,000 |
|  |  | 37,000 | Debtors |  |  |
|  |  | 8,000 | Less: Provision for |  |  |
|  |  |  | bad debts |  | 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.
(a) Furniture is to be revalued at ₹ 5,000 and building is to be revalued at ₹ 50,000 .
(c) Provision for doubtful debts is to be increased to ₹5,500
(d) An unrecorded investment of ₹ 6,000 is to be brought into account
(e) 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) <|||||| 176 ||||||
15. Selvam and Senthil are partners sharing profit in the ratio of $2: 3$. Siva is admitted into the firm with $1 / 5$ 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 $1 / 5$ 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 $1 / 5$ 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 $1 / 3$ 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 $1 / 3$ 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 $₹ \mathbf{~} 4,000$ )
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 $2 / 5$ 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
(a) write off the entire amount of existing goodwill
(b) 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 |  |

On 1.4.2017, they admit Ganesan as a new partner on the following arrangements:
(i) Ganesan brings $₹ 10,000$ as capital for $1 / 5$ share of profit.
(ii) Stock and furniture is to be reduced by $10 \%$, a reserve of $5 \%$ on debtors for doubtful debts is to be created.
(iii) 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: ₹ $\mathbf{1 5 , 0 2 5 ;}$ 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:
(a) 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.
(b) That the stock be valued at ₹ $20,000$.
(c) That the furniture be depreciated by ₹ 2,000 .
(d) 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: ₹ $\mathbf{1 , 4 0 , 0 0 0 )}$
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 $\checkmark$ 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 <br> number | Asset/liability | Increase | Decrease | Debit <br> revaluation <br> account | Credit <br> revaluation <br> account |
| :---: | :--- | :--- | :--- | :--- | :--- |
| 1 | Asset | $\checkmark$ |  |  | $\checkmark$ |
| 2 | Asset |  | $\checkmark$ | $\checkmark$ |  |
| 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 | $?$ | $?$ | 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?

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## RETIREMENT AND DEATH OF A PARTNER

| Retirement of a partner |  |
| :--- | :--- |
| 6.1 | Introduction |
| 6.2 | Adjustments required on retirement <br> of a partner |
| 6.3 | Distribution of accumulated profits, <br> reserves and losses |
| 6.4 | Revaluation of assets and liabilities |
| 6.5 | Determination of new profit sharing <br> ratio and gaining ratio |
| 6.6 | Adjustment for goodwill |
| 6.7 | Adjustment for current year's profit <br> or loss upto the date of retirement |
| 6.8 | Settlement of the amount due to the <br> retiring partner |
| Death of a partner |  |
| 6.9 | Adjustments required on the death of <br> a partner |

## Learning objectives

To enable the students to
$\stackrel{\wedge}{ }$ Understand the accounting treatment at the time of retirement and death of a partner.
$\stackrel{\text { Prepare the partnership accounts on }}{ }$ retirement and 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
$\stackrel{>}{ }$ Partnership deed
- Partners' capital accounts
- Valuation of goodwill


## RETI REMENT OF A PARTNER

### 6.1 I ntroduction

## 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. Incase 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 <br> ₹ |
| :---: | :---: | :---: | :---: | :---: |
|  | Profit and loss Appropriation A/c Dr. <br> General reserve A/c Dr. <br> Reserve fund A/c Dr. <br> Workmen compensation fund A/c Dr. <br> Investment fluctuation fund A/c Dr. <br> To All partners' capital / current A/c (in the old ratio)  |  | xxx xxx xxx xxx xxx | xxx |

(b) For transferring accumulated loss

| Date | Particulars | L.F | Debit <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | All partners' capital / current A/c <br> To Profit and loss A/c (in old ratio) | Dr. |  | xxx |

## I Ilustration 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | General reserve A/c | Dr. |  | 60,000 |  |
| March 31 | To Vivin's capital A/c | $(60,000 \times 3 / 6)$ |  |  | 30,000 |
|  | To Hari's capital A/c | $(60,000 \times 2 / 6)$ |  | 20,000 |  |
|  | To Joy's capital A/c | $(60,000 \times 1 / 6)$ |  | 10,000 |  |
|  | (General reserve transferred to all partners' capital |  |  |  |  |
|  | account in the old profit sharing ratio) |  |  |  |  |

## Ilustration 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 <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :--- | ---: | ---: | ---: | :---: |
| 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' <br> capital account in the old profit sharing ratio) |  |  |  |  |

## I Ilustration 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 $31^{\text {st }}$ 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. | $\begin{gathered} \text { Debit } \\ \text { ₹ } \end{gathered}$ | $\begin{aligned} & \text { Credit } \\ & ₹ \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | Profit and loss appropriation A/c | Dr. |  | 10,000 |  |
| March 31 | General reserve A/c | Dr. |  | 15,000 |  |
|  | Workmen compensation fund $\mathrm{A} / \mathrm{c}$ | Dr. |  | 17,000 |  |
|  | To Prince's capital A/c ( $42,000 \times 2 / 7)$ |  |  |  | 12,000 |
|  | To Dev's capital A/c ( $42,000 \times 4 / 7)$ |  |  |  | 24,000 |
|  | To Sasireka's capital A/c ( $42,000 \times 1 / 7)$ |  |  |  | 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.
(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
(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. | $\begin{gathered} \text { Debit } \\ \text { ₹ } \end{gathered}$ | $\begin{aligned} & \text { Credit } \\ & \text { ₹ } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. For increase in the value of asset <br> Concerned asset A/c <br> To Revaluation A/c | Dr. |  | xxx | xxx |
|  | 2. For decrease in the value of asset <br> Revaluation A/c <br> To Concerned asset A/c | Dr. |  | xxx | xxx |
|  | 3. For increase in the amount of liabilities Revaluation A/c <br> To Concerned liability A/c | Dr. |  | xxx | xxx |
|  | 4. For decrease in the amount of liability <br> Concerned liability A/c <br> To Revaluation A/c | Dr. |  | xxx | xxx |
|  | 5. For recording an unrecorded asset <br> Concerned asset A/c <br> To Revaluation A/c | Dr. |  | xxx | xxx |
|  | 6. For recording an unrecorded liability <br> Revaluation A/c <br> To Concerned liability A/c | Dr. |  | xxx | xxx |
|  | 7. For transferring the balance in revaluation $\mathrm{A} / \mathrm{c}$ <br> (a) For profit on revaluation <br> Revaluation A/c <br> To All partners' capital A/c <br> (individually in old profit sharing ratio) <br> (b) For loss on revaluation <br> All partner's capital A/c <br> (individually in old profit sharing ratio) <br> To Revaluation A/c | Dr. <br> Dr. |  | xxx <br> xxx | xxx <br> xxx |

Format of revaluation account is as follows:

| Dr. Revaluation Account |  |  | $\begin{aligned} & \text { Cr. } \\ & \hline ₹ \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 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 <br> (profit on revaluation shared in old ratio) * | Xxx | By All partners' capital A/c <br> (loss on revaluation shared in old ratio)* | xxx |
|  | xxx |  | xxx |

*There will be either profit or loss on revaluation.

## I Ilustration 4

Ramya, Sara and Thara are partners sharing profits and losses in the ratio of 5:3:2. On $1^{\text {st }}$ April 2018, Thara retires and on retirement, the following adjustments are agreed upon:
(i) Increase the value of premises by ₹ 40,000 .
(ii) Depreciate stock by ₹ 3,000 and machinery by ₹ 6,500 .
(iii) Provide an outstanding liability of ₹ 500

Pass journal entries and prepare revaluation account.

## Solution

Journal Entries

| Date | Particulars | L.F. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | Credit ₹ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2018 \\ \text { April } 1 \end{gathered}$ | Premises A/c <br> To Revaluation A/c <br> (Value of premises increased) |  | 40,000 | 40,000 |
| " | Revaluation A/c Dr. <br> To Stock A/c  <br> To Machinery A/c  <br> To Outstanding liability A/c  <br> (Decrease in value of assets and outstanding liability  <br> recorded)  |  | 10,000 | $\begin{array}{r} 3,000 \\ 6,500 \\ 500 \end{array}$ |
| " | Revaluation A/c <br> To Ramya's capital A/c <br> To Sara's capital A/c <br> To Thara's capital A/c <br> (Profit on revaluation distributed) |  | 30,000 | $\begin{array}{r} 15,000 \\ 9,000 \\ 6,000 \end{array}$ |

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 | 30,000 |  |  |
|  |  | 40,000 |  | 40,000 |

## Student activity 6.2

Write any four transactions that may increase the profit on revaluation.

## I Ilustration 5

Prabu, Ragu and Siva are partners sharing profits and losses in the ratio of 3:2:1. Prabu retires from partnership on $1^{\text {st }}$ April 2017. The following adjustments are to be made:
(i) Increase the value of building by ₹ 12,000
(ii) Reduce the value of furniture by ₹ 8,500
(iii) 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. | $\underset{₹}{\text { Debit }}$ | Credit ₹ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2017 \\ \text { April } 1 \end{gathered}$ | Building A/c <br> To Revaluation A/c (Increase in the value of building accounted) |  | 12,000 | 12,000 |
| " | Revaluation A/c <br> To Furniture A/c <br> To Outstanding salary $\mathrm{A} / \mathrm{c}$ <br> (Reduction in the value of furniture and outstanding <br> salary accounted) |  | 15,000 | $\begin{aligned} & 8,500 \\ & 6,500 \end{aligned}$ |
| " | Prabu's capital A/c Dr <br> Ragu's capital A/c Dr <br> Siva's capital A/c Dr <br> To Revaluation A/c  <br> (Loss on revaluation transferred to capital accounts)  |  | $\begin{array}{r} \hline 1,500 \\ 1,000 \\ 500 \end{array}$ | 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 <br> Prabu's capital A/c (3/6) <br> Ragu's capital A/c (2/6) <br> Siva's capital A/c (1/6) |  |  |
|  |  |  | 1,500 |  |
|  |  |  | 1,000 |  |
|  |  |  | 500 | 3,000 |
|  | 15,000 |  |  | 15,000 |

## I llustration 6

John, James and Raja are partners in a firm sharing profits and losses equally. Their balance sheet as on $31^{\text {st }}$ March, 2019 is as follows:

| Liabilities |  | ₹ | Assets |  | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital accounts: <br> John <br> James <br> Raja <br> Sundry creditors | $\begin{array}{r} 80,000 \\ 60,000 \\ 1,00,000 \\ \hline \end{array}$ | $\begin{aligned} & 2,40,000 \\ & 1,20,000 \end{aligned}$ | Office equipment <br> Machinery <br> Sundry debtors <br> Less: Provision for doubtful debts <br> Stock <br> Cash at bank |  | 70,000 |
|  |  |  |  |  | 1,40,000 |
|  |  |  |  | 52,000 |  |
|  |  |  |  |  |  |
|  |  |  |  | 2,000 | 50,000 |
|  |  |  |  |  | 60,000 |
|  |  |  |  |  | 40,000 |
|  |  | 3,60,000 |  |  | 3,60,000 |

Raja retired on $31^{\text {st }}$ March, 2019 subject to the following conditions:
(i) Machinery is valued at ₹ $1,30,000$
(ii) Value of office equipment is brought down by ₹ 2,000
(iii) Provision for doubtful debts should be increased to ₹ 3,000
(iv) 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | :--- | :---: | :---: |
| March 319 | Revaluation A/c | Dr. |  | 13,000 |
|  | To Machinery A/c |  |  | 10,000 |
|  | To Office equipment A/c |  |  | 2,000 |
|  | To Provision for doubtful debts A/c |  |  |  |
|  | (Depreciation on machinery and furniture and |  |  |  |
|  | provision made for doubtful debts adjusted) |  |  |  |



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 |  |  | 25,000 |
| Raja's Capital A/c (1/3) | 4,000 | $\mathbf{1 2 , 0 0 0}$ |  |  |

(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:

Share gained $=$ New share - Old share
Gaining ratio $=$ 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:
Gaining ratio $=$ Ratio of share gained by the continuing partners
Share gained = New share - 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

Share gained = New share - Old share
Vinoth

$$
=\frac{2}{3}-\frac{3}{10}=\frac{20-9}{30}=\frac{11}{30}
$$

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:

New share of continuing partner $=$ Old share + 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.

Share gained by Arya $=\frac{2}{8}$
Gaining ratio $=\frac{2}{8}: 0$ that is, $\frac{1}{4}: 0$ or 1:0
New share of continuing partner $=$ Old share + Share gained
Arya $\quad=\frac{3}{8}+\frac{2}{8}=\frac{5}{8}$
Benin $\quad=\frac{3}{8}+0=\frac{3}{8}$
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

## I Ilustration 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

Rohit's share $\frac{2}{10}$
Share gained $=$ Retiring partner's share $\times$ Proportion of share gained
Rahul $\quad=\frac{2}{10} \times \frac{3}{5}=\frac{6}{50}$
Ravi $\quad=\frac{2}{10} \times \frac{2}{5}=\frac{4}{50}$
Gaining ratio $=\frac{6}{50}: \frac{4}{50}$ that is, $3: 2$
New share of continuing partners $=$ Old share + Share gained
Rahul $\quad=\frac{5}{10}+\frac{6}{50}=\frac{25+6}{50}=\frac{31}{50}$
Ravi $\quad=\frac{3}{10}+\frac{4}{50}=\frac{15+4}{50}=\frac{19}{50}$
The new profit sharing ratio of Rahul and Ravi is $\frac{31}{50}: \frac{19}{50}$ that is 31:19.

## I Ilustration 10

Kumar, Kesavan and Manohar are partners sharing profits and losses in the ratio of $1 / 2,1 / 3$ and $1 / 6$ 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.
Manohar's share $\quad=\frac{1}{6}$
Share gained $=$ Retiring partner's share $\times$ Proportion of share gained
Kumar

$$
=\frac{1}{6} \times \frac{1}{2}=\frac{1}{12}
$$

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
Kumar

$$
=\frac{1}{2}+\frac{1}{12}=\frac{6+1}{12}=\frac{7}{12}
$$

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.

## I Ilustration 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 <br> is sacrificed by the old partners in <br> favour of a new partner. | It is the proportion of the profit which <br> is gained by the continuing partners <br> from the retiring partner. |
| 2. Purpose | It is calculated to determine the amount <br> to be adjusted towards goodwill for the <br> sacrificing partners. | It is calculated to determine the <br> amount to be adjusted towards <br> goodwill for the gaining partners. |
| 3. Time of <br> calculation | It is calculated at the time of admission <br> of a new partner. | It is calculated at the time of <br> retirement of a partner. |
| 4. Method of <br> calculation | It is the difference between the old ratio <br> and the new ratio <br> Sacrificing ratio = Old profit sharing <br> ratio - New profit sharing ratio | It is the difference between the new <br> ratio and the old ratio. <br> Gaining ratio = New profit sharing <br> 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Continuing partners' capital / current A/c (in gaining ratio) <br> To Retiring partner's capital / current A/c | Dr. | xxx |  |

## I llustration 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.

Suresh's share of goodwill $=36,000 \times \frac{3}{6}=₹ 18,000$
196 ||II|||

Journal Entries

| Date | Particulars |  | L.F. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\begin{aligned} & \text { Credit } \\ & \text { ₹ } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Senthamari's capital A/c ( $18,000 \times 2 / 3)$ <br> Raj's capital A/c <br> $(18,000 \times 1 / 3)$ <br> To Suresh's capital A/c <br> (Suresh's share of goodwill adjusted) | Dr. <br> Dr. |  | $\begin{array}{r} 12,000 \\ 6,000 \end{array}$ | 18,000 |

### 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. | $\begin{array}{c}\text { Debit } \\ ₹\end{array}$ | $\begin{array}{c}\text { Credit } \\ ₹\end{array}$ |
| :---: | :--- | :---: | :---: | :---: |
|  | $\begin{array}{l}\text { All partners' capital / current A/c (in old ratio) } \\ \text { To Goodwill A/c } \\ \text { (Existing goodwill written off) }\end{array}$ | Dr. |  | xxx |$]$

## I Ilustration 13

Naresh, Mani and Muthu are partners in a firm sharing profits and losses in the ratio of 2:2:1. On $31^{\text {st }}$ 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
(a) write off the entire amount of existing goodwill
(b) 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | :--- | :--- | :--- | ---: | :---: |
| 2019 | Naresh's capital A/c | $(40,000 \times 2 / 5)$ | Dr. |  | 16,000 |  |
| March 31 | Mani's capital A/c | $(40,000 \times 2 / 5)$ | Dr. |  | 16,000 |  |
|  | Muthu's capital A/c | $(40,000 \times 1 / 5)$ | 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 ₹ $\mathbf{2 0 , 0 0 0}$

Journal entry

| Date | Particulars |  |  | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | ---: | :---: | :---: | :---: |
| 2019 | Naresh's capital A/c | $(20,000 \times 2 / 5)$ | Dr. |  | 8,000 |  |
| March 31 | Mani's capital A/c | $(20,000 \times 2 / 5)$ | Dr. |  | 8,000 |  |
|  | Muthu's capital A/c | $(20,000 \times 1 / 5)$ | 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. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\begin{aligned} & \text { Credit } \\ & \text { ₹ } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Profit and loss Suspense A/c <br> To Retiring partner's capital / current A/c (Retiring partner's current year share of profit credited to his capital account) |  | xxx | xxx |

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.

## I Ilustration 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:

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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | ---: | ---: | ---: |
| 2019 | Profit and loss Suspense A/c |  |  |  |
| March 31 | To Rithika's capital A/c |  |  |  |
| (Rithika's current year share of profit credited |  |  |  |  |
| to her capital account) |  |  |  |  |$\quad$| 2,500 |  |
| :--- | :--- |

(b) If profit is to be distributed on the basis of the average profit of the past 3 years:

Average profit

$$
=\frac{5,000+10,000+30,000}{3}
$$

$$
=15,000
$$

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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | ---: | :---: | :---: | :---: |
| 2019 | Profit and loss Suspense A/c | Dr. | 1,250 |  |
| March 31 | To Rithika’s capital A/c <br> (Rithika's current year share of profit credited <br> to her capital account) |  |  | 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | :--- | :---: | :---: |
|  | Retiring partner's capital A/c <br> To Cash / Bank A/c |  | xxx |  |

(b) When the amount due is not paid immediately in cash

| Date | Particulars | L.F. | $\begin{array}{c}\text { Debit } \\ ₹\end{array}$ | $\begin{array}{c}\text { Credit } \\ ₹\end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{l}\text { Retiring partner's capital A/c } \\ \text { To Retiring partner's loan A/c }\end{array}$ | 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 <br> To Cash / Bank A/c (amount paid) <br> To Retiring partner's loan A/c | Dr. |  | xxx | $\begin{aligned} & \mathrm{xxx} \\ & \mathrm{xxx} \end{aligned}$ |

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.

## I Ilustration 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 $31^{\text {st }}$ 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 <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :--- | ---: | ---: | ---: | :---: |
| 2018 <br> Dec. 31 | (i) Kumudha's capital A/c <br> To Bank A/c <br> (Amount due paid immediately) | Dr. | $2,00,000$ |  |  |
| $"$ | (ii) Kumudha's capital A/c <br> To Kumudha's loan A/c <br> (Amount due transferred to loan account) | Dr. |  | $2,00,000$ | $2,00,000$ |
| $"$ | (iii) Kumudha's capital A/c <br> To Bank A/c <br> To Kumudha's loan A/c <br> (₹ 70,000 paid and the balance transferred to loan account) | Dr. |  | $2,00,000$ |  |

## I Ilustration 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 $31^{\text {st }}$ 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

$$
\text { Dr. } \quad \text { Revaluation Account } \quad \text { Cr. }
$$

| 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 | 10,000 |  |  |
|  |  | 16,000 |  | 16,000 |


| Dr. Capital Account |  |  |  |  |  |  | Cr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | $\begin{gathered} \text { Mani } \\ ₹ \end{gathered}$ | Rama <br> ₹ | $\begin{gathered} \text { Devan } \\ ₹ \end{gathered}$ | Particulars | $\begin{gathered} \text { Mani } \\ \text { ₹ } \end{gathered}$ | Rama <br> ₹ | $\begin{gathered} \text { Devan } \\ ₹ \end{gathered}$ |
| To Mani's loan A/c | 66,000 |  |  | By Balance b/d | 50,000 | 50,000 | 50,000 |
| To Balance c/d |  | 62,000 | 62,000 | 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

## I Ilustration 17

Charles, Muthu and Sekar are partners, sharing profits in the ratio of 3:4:2. Their balance sheet as on $31^{\text {st }}$ 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.
(i) Stock to be appreciated by $10 \%$
(ii) Furniture to be depreciated by $5 \%$
(iii) To provide ₹ 1,000 for bad debts
(iv) There is an outstanding repairs of ₹ 11,000 not yet recorded
(v) 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 | $\mathbf{9 , 0 0 0}$ |
|  |  |  |  | 13,000 |

Dr.
Capital Account
Cr.

| Particulars | Charles ₹ | Muthu ₹ | Sekar ₹ | Particulars | Charles ₹ | Muthu ₹ | Sekar ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Profit and loss A/c | 6,000 | 8,000 | 4,000 | By Balance b/d <br> By Workmen's compensation fund | 30,000 | 40,000 | 20,000 |
| To Revaluation A/c (loss) | 3,000 | 4,000 | 2,000 |  |  |  |  |
| To Bank | 30,000 |  |  |  | 9,000 | 12,000 | 6,000 |
| To Balance c/d |  | 40,000 | 20,000 |  |  |  |  |
|  | 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: <br> Muthu <br> Sekar <br> Sundry creditors <br> Outstanding repairs | $\begin{aligned} & 40,000 \\ & 20,000 \end{aligned}$ | $\begin{aligned} & 60,000 \\ & 33,000 \\ & 11,000 \end{aligned}$ | Furniture | 20,000 | 19,000 |
|  |  |  | Less: Depreciation | 1,000 |  |
|  |  |  | Stock | 40,000 |  |
|  |  |  | Add: Appreciation | 4,000 | 44,000 |
|  |  |  | 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 |
|  |  | 1,04,000 |  |  | 1,04,000 |

## I Ilustration 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 $31^{\text {st }}$ 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 |  |  |
| Sundry creditors |  | 50,000 | bad debts | 1,000 | 17,000 |
|  |  |  | Cash at bank |  | 9,000 |
|  |  | 1,76,000 |  |  | 1,76,000 |

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 | 6,000 |  |  |
|  |  | 14,000 |  | 14,000 |


| Dr. Capital Account Cr. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | Raghu $₹$ | $\begin{gathered} \text { Ravi } \\ \text { ₹ } \end{gathered}$ | Ramesh <br> ₹ | Particulars | Raghu $₹$ | $\begin{gathered} \text { Ravi } \\ \text { ₹ } \end{gathered}$ | Ramesh ₹ |
| To Ramesh's capital A/c <br> To Ramesh's loan A/c To Balance c/d | 1,600 | 2,400 | - <br> 31,000 | By Balance b/d <br> By Reserve fund $\mathrm{A} / \mathrm{c}$ <br> By Revaluation A/c <br> By Raghu's <br> capital A/c <br> By Ravi's <br> capital A/c | 30,000 | 40,000 | 20,000 |
|  |  |  |  |  | 12,000 | 18,000 | 6,000 |
|  |  |  |  |  | 2,000 | 3,000 | 1,000 |
|  |  |  |  |  |  |  |  |
|  | 42,400 | 58,600 |  |  | - |  | 1,600 |
|  |  |  |  |  |  |  | 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: <br> Raghu <br> Ravi <br> Ramesh's loan <br> Sundry creditors | $\begin{aligned} & 42,400 \\ & 58,600 \end{aligned}$ | $\begin{array}{r} 1,01,000 \\ 31,000 \\ 50,000 \end{array}$ | Buildings <br> Add: Appreciation <br> Machinery <br> Less: Depreciation <br> Stock <br> Add: Appreciation <br> Debtors <br> Less: Provision for bad debts <br> Cash at bank | 60,000 | 72,000 |
|  |  |  |  | 12,000 |  |
|  |  |  |  | 70,000 |  |
|  |  |  |  | 7,000 | 63,000 |
|  |  |  |  | 20,000 |  |
|  |  |  |  | 2,000 | 22,000 |
|  |  |  |  | 18,000 |  |
|  |  |  |  | 2,000 | 16,000 |
|  |  |  |  |  | 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: $4,000 \times 2 / 5=₹ 1,600$
Ravi : $4,000 \times 3 / 5=₹ 2,400$

## I Ilustration 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 $31^{\text {st }}$ 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 $31^{\text {st }}$ 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 | $\mathbf{3 , 0 0 0}$ |  | 7,000 |

Dr.
Capital Account
Cr.

| Particulars | Muthu ₹ | Murali ₹ | Manoj ₹ | Particulars | Muthu ₹ | Murali ₹ | Manoj ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Manoj's capital A/c <br> To Manoj's loan A/c <br> To Balance c/d | 3,000 | 7,000 | $33,000$ | By | 20,000 | 25,000 | 20,000 |
|  |  |  |  | By General reserve A/c | 3,000 | 1,000 | 2,000 |
|  | 21,500 | 19,500 |  | By Revaluation A/c | 1,500 | 500 | 1,000 |
|  |  |  |  | (profit) |  |  |  |
|  |  |  |  | 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

$$
\begin{aligned}
& =\text { New share }- \text { old share } \\
& =\frac{3}{5}-\frac{3}{6}=\frac{18-15}{30}=\frac{3}{30}
\end{aligned}
$$

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 ${ }^{\text {st }}$ December, 2018

| Liabilities | ₹ | ₹ | Assets | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital accounts <br> Muthu <br> Murali <br> Manoj's loan A/c Creditors | $\begin{aligned} & 21,500 \\ & 19,500 \end{aligned}$ | $\begin{aligned} & 41,000 \\ & 33,000 \\ & 29,000 \end{aligned}$ | Machinery <br> Less: Depreciation | $\begin{array}{r} 45,000 \\ 2,000 \end{array}$ | 43,000 |
|  |  |  | Furniture |  | 5,000 |
|  |  |  | Debtors | 30,000 |  |
|  |  |  | 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.

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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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
| Deceased partner's capital A/c <br> To Deceased partner's executor A/c | Dr. |  | xxx |  |

(ii) For payment made
(a) When the amount due is paid in cash immediately

| Date | Particulars | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Deceased partner's executor A/c <br> To Cash / Bank A/c | Dr. |  | xxx |

(b) When the amount due is not paid immediately in cash
\(\left.$$
\begin{array}{|c|c|c|c|c|}\hline \text { Date } & \text { Particulars } & \text { L.F. } & \begin{array}{c}\text { Debit } \\
₹\end{array} & \begin{array}{c}\text { Credit } \\
₹\end{array}
$$ <br>
\hline \& \begin{array}{c}Deceased partner's executor A/c <br>

To Deceased partner's executor loan A/c\end{array} \& Dr. \& \& \mathrm{xxx}\end{array}\right]\)| xxx |
| :---: |

(c) When the amount due is partly paid in cash immediately

| Date | Particulars | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | :--- | :---: | :---: |
|  | Deceased partner's executor A/c | Dr. |  | xxx |
|  | To Cash / Bank A/c (amount paid) |  |  |  |
|  | To Deceased partner's executor loan A/c |  |  |  |
| xxx |  |  |  |  |
|  |  |  |  | xxx |

## | Ilustration: 20

Rathna, Baskar and Ibrahim are partners sharing profits and losses in the ratio of 2:3:4 respectively. Rathna died on $31^{\text {st }}$ December, 2018. Final amount due to her showed a credit balance of ₹ $1,00,000$. Pass journal entries if,
(a) The amount due is paid off immediately by cheque.
(b) The amount due is not paid immediately.
(c) ₹ 60,000 is paid immediately by cheque.

Journal entries

| Date | Particulars | L.F. | Debit ₹ | $\begin{aligned} & \text { Credit } \\ & \text { ₹ } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) Rathna’s Executor A/c <br> To Bank A/c <br> (Amount due paid immediately) |  | 1,00,000 | 1,00,000 |
|  | (b) Rathna's Executor A/c <br> To Rathna's Executor loan A/c <br> (Amount due transferred to loan account) |  | 1,00,000 | 1,00,000 |
|  | (c) Rathna's Executor A/c Dr. <br> To Bank A/c  <br> $\quad$ To Rathna's Executor loan A/c  <br> (₹ 60,000 paid and the balance transferred to  <br> loan account)  |  | 1,00,000 | $\begin{aligned} & 60,000 \\ & 40,000 \end{aligned}$ |



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. Incase of individual policy, if a partner dies, his policy alone matures and the policy amount is received from the insurance company.
Incase 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 $31^{\text {st }}$ December, 2018 is as under:

Balance Sheet as on 31 ${ }^{\text {st }}$ 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 |  |  |
|  |  | $1,50,000$ |  | $1,50,000$ |

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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 | $\mathbf{6 , 0 0 0}$ |  | 11,000 |


| Dr. |
| :--- |
| Particulars Sundar <br> $₹$ Vivek <br> $₹$ Pandian <br> $₹$ Particulars Sundar <br> $₹$ Vivek <br> $₹$ Pandian <br> $₹$ <br> To Profit and loss A/c 3,000 2,000 1,000 By Balance b/d 50,000 40,000 10,000 <br> To Pandian's        <br> Executor A/c        <br> To Balance c/d        |
| $\mathbf{6 8 , 0 0 0}$ |

Balance Sheet as on 1 ${ }^{\text {st }}$ January, 2019


## I llustration 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 ${ }^{\text {st }}$ 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 | $\mathbf{8 , 0 0 0}$ |  | 9,000 |
|  |  | 9,000 |  |  |

Dr.
Capital Account
Cr.


Balance Sheet as on 31 ${ }^{\text {st }}$ December, 2018

| Liabilities | ₹ | ₹ | Assets | ₹ | ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital accounts: <br> Ramesh <br> Ravi <br> Akash's Executor's A/c <br> Sundry creditors | $\begin{aligned} & 33,000 \\ & 33,000 \end{aligned}$ | $\begin{array}{r} 66,000 \\ 34,000 \\ 8,000 \end{array}$ | Plant and machineryAdd: AppreciationStockLess: DepreciationDebtorsCash at bankCash in handProfit and loss$\quad$ suspense A/c | 45,000 | 54,000 |
|  |  |  |  | 9,000 |  |
|  |  |  |  | 22,000 |  |
|  |  |  |  | 1,000 | 21,000 |
|  |  |  |  |  | 15,000 |
|  |  |  |  |  | 10,000 |
|  |  |  |  |  | 4,000 |
|  |  |  |  |  |  |
|  |  |  |  |  | 4,000 |
|  |  | 1,08,000 |  |  | 1,08,000 |

## 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

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 $30^{\text {th }}$ 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 $\mathrm{A} / \mathrm{c}$
(c) Retiring partner's loan $\mathrm{A} / \mathrm{c}$
(d) Other partners' capital A/c
7. 'A' was a partner in a partnership firm. He died on $31^{\text {st }}$ 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. $\mathrm{A}, \mathrm{B}$ 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. $\mathrm{X}, \mathrm{Y}$ and Z were partners sharing profits and losses equally. X died on $1^{\text {st }}$ 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

| $1(\mathrm{c})$ | $2(\mathrm{~b})$ | $3(\mathrm{a})$ | $4(\mathrm{~b})$ | $5(\mathrm{c})$ | $6(\mathrm{c})$ | $7(\mathrm{~d})$ | $8(\mathrm{~b})$ | $9(\mathrm{c})$ | $10(\mathrm{~b})$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 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: ₹ $\mathbf{1 0 , 0 0 0 ( C r . ) )}$
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.))
|||||| 216 |||II|
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 $31^{\text {st }}$ 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 accumlatetd 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 $1^{\text {st }}$ April 2017, Roja retires and on retirement, the following adjustments are agreed upon.
(i) Increase the value of building by ₹ 30,000 .
(ii) Depreciate stock by ₹ 5,000 and furniture by ₹ 12,000 .
(iii) Provide an outstanding liability of ₹ 1,000

Pass journal entries and prepare revaluation account.
(Answer: Revaluation profit: ₹ $\mathbf{1 2 , 0 0 0 )}$
5. Vinoth, Karthi and Pranav are partners sharing profits and losses in the ratio of 2:2:1. Pranav retires from partnership on $1^{\text {st }}$ April 2018. The following adjustments are to be made.
(i) Increase the value of land and building by ₹ 18,000
(ii) Reduce the value of machinery by ₹ 15,000
(iii) 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 $31^{\text {st }}$ 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 $31^{\text {st }}$ March 2019 subject to the following conditions:
(i) Machinery is valued at ₹ $1,50,000$
(ii) Value of furniture brought down by ₹ 10,000
(iii) Provision for doubtful debts should be increased to ₹ 5,000
(iv)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 $1 / 2,1 / 4$ and $1 / 4$ 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: ₹ $\mathbf{1 5 , 0 0 0}$;
Rajan's capital: ₹ 10,000 (Dr.); Jegan's capital: ₹ $\mathbf{5 , 0 0 0}$ (Dr.))
13. Balu, Chandru and Nirmal are partners in a firm sharing profits and losses in the ratio of 5:3:2. On $31^{\text {st }}$ 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
(a) write off the entire amount of existing goodwill
(b) 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
(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 4 years

Also pass necessary journal entries by assuming partners capitals are fluctuating.
(Answer: (a) Rathi's share of profit: ₹ $\mathbf{1 , 6 0 0}$ ); (b) Rathi's share of profit: ₹ $\mathbf{1 , 0 0 0}$ )
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:
(a) The amount due is paid off immediately.
(b) The amount due is not paid immediately.
(c) ₹ $1,00,000$ 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 $31^{\text {st }}$ 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:
(i) Stock to be depreciated by ₹ 10,000
(ii) Provision for doubtful debts to be created for ₹ 3,000 .
(iii) 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 $31^{\text {st }}$ December, 2017 was as follows:

| Liabilities | ₹ | ₹ | Assets | ₹ |
| :---: | :---: | :---: | :---: | :---: |
| Capital accounts: |  | 2,20,000 | Buildings | 90,000 |
| Kannan | 1,00,000 |  | Machinery | 60,000 |
| Rahim | 80,000 |  | Debtors | 30,000 |
| John | 40,000 |  | Stock | 20,000 |
| Workmen compensation |  |  | Cash at bank | 50,000 |
| fund |  | 30,000 | Profit and loss A/c (loss) | 20,000 |
| Creditors |  | 20,000 |  |  |
|  |  | 2.70,000 |  | 2,70,000 |

John retires on $1^{\text {st }}$ January 2018, subject to following conditions:
(i) To appreciate building by $10 \%$
(ii) Stock to be depreciated by $5 \%$.
(iii)To provide ₹ 1,000 for bad debts
(iv) An unrecorded liability of ₹ 8,000 have been noticed.
(v) 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:


Karan retires on 1.1.2017 subject to the following conditions:
(i) Goodwill of the firm is valued at ₹ 21,000
(ii) Machinery to be appreciated by $10 \%$
(iii) Building to be valued at ₹ 80,000
(iv) Provision for bad debts to be raised to ₹ 2,000
(v) Stock to be depreciated by ₹ 2,000
(vi)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 $31^{\text {st }}$ 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 $31^{\text {st }}$ 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 $31^{\text {st }}$ December 2017 is as under:

Balance Sheet as on 31 ${ }^{\text {st }}$ 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: ₹ $\mathbf{2 , 0 2 , 0 0 0 )}$

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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## COMPANY ACCOUNTS

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To enable the students to
Understand the statutory
provisions regarding issue,
forfeiture and reissue of shares.

$\stackrel{\text { Understand the accounting }}{ }$| treatment for issue, forfeiture and |
| :--- |
| reissue of shares. |

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.

## Points to recall

The following points are to be recalled before learning company accounts:

- Joint stock company
- Double entry system



### 7.1 I ntroduction

## 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 incase 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. Incase 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 $₹$ | $\underset{₹}{\text { Credit }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 1. On receipt of application money <br> Bank A/c <br> Dr. <br> To Equity share application A/c |  | xxx | xxx |
|  | 2. On allotment of shares, to transfer share application money <br> Share application A/c <br> To Equity share capital A/c |  | xxx | xxx |
|  | 3. On refund of application money for rejected applications <br> Equity share application A/c <br> To Bank A/c |  | xxx | xxx |
|  | 4. For allotment money due <br> Equity share allotment A/c <br> Dr. <br> To Equity share capital A/c |  | xxx | xxx |
|  | 5. On receipt of allotment money <br> Bank A/c <br> To Equity share allotment A/c |  | Xxx | xxx |
|  | 6. On making call for the call money due <br> Equity share call A/c <br> To Equity share capital A/c |  | xxx | xxx |
|  | 7. On receipt of call money <br> Bank A/c <br> Dr. <br> To Equity share call A/c |  | xxx | 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.

In the books of Thai Ltd.
Journal entries

| Date | Particulars | L.F. | Debit | $\underset{₹}{\text { Credit }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c <br> To Equity share application A/c (Application money received) |  | 5,00,000 | 5,00,000 |
|  | Equity share application A/c <br> To Equity share capital A/c (Transfer of share application money to share capital) |  | 5,00,000 | 5,00,000 |
|  | Equity share allotment A/c <br> Dr. <br> To Equity share capital A/c <br> (Share allotment money due) |  | 2,00,000 | 2,00,000 |
|  | Bank A/c <br> To Equity share allotment A/c <br> (Allotment money received) |  | 2,00,000 | 2,00,000 |
|  | Equity share first call A/c <br> To Equity share capital A/c <br> (Share first call money due) |  | 2,00,000 | 2,00,000 |
|  | Bank A/c <br> To Equity share first call A/c <br> (Share first call money received) |  | 2,00,000 | 2,00,000 |
|  | Equity share second and final call $\mathrm{A} / \mathrm{c}$ <br> To Equity share capital A/c <br> (Share second and final call money due) |  | 1,00,000 | 1,00,000 |
|  | Bank A/c <br> To Equity share second and final call A/c <br> (Share second and final call money received) |  | 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 <br> Journal entries

| Date | Particulars | L.F. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\underset{₹}{\text { Credit }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c $(9,000 \times 5)$ <br> To Equity share application A/c (Application money received) |  | 45,000 | 45,000 |
|  | Equity share application $\mathrm{A} / \mathrm{c}$ Dr. <br> To Equity share capital A/c  <br> (Transfer of application money to share capital A/c)  |  | 45,000 | 45,000 |
|  | Equity share allotment A/c <br> To Equity share capital A/c <br> (Allotment money due) |  | 27,000 | 27,000 |
|  | Bank A/c <br> To Equity share allotment A/c <br> (Allotment money received) |  | 27,000 | 27,000 |
|  | Equity share first and final call A/c <br> To Equity share capital A/c <br> (Call money due) |  | 18,000 | 18,000 |
|  | Bank A/c Dr. <br> To Equity share first and final call $\mathrm{A} / \mathrm{c}$  <br> (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:
(a) Some applications are accepted in full and others are totally rejected. Application money is returned to the applicants for rejected applications.
(b) 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.
(c) 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 ( $1,20,000 \times 5$ ) <br> To Equity share application A/c <br> (Application money received) |  | 6,00,000 | 6,00,000 |
|  | Equity share application A/c ( $1,00,000 \times 5$ ) <br> To Equity share capital A/c <br> (Transfer of share application money to share capital) |  | 5,00,000 | 5,00,000 |
|  | Equity share application A/c (20,000 $\times 5$ ) <br> To Bank A/c <br> (Excess share application money refunded) |  | 1,00,000 | 1,00,000 |
|  | Equity share allotment A/c <br> To Equity share capital A/c <br> (Share allotment money due) |  | 3,00,000 | 3,00,000 |
|  | Bank A/c <br> To Equity share allotment A/c <br> (Allotment money received) |  | 3,00,000 | 3,00,000 |
|  | Equity share first and final call $\mathrm{A} / \mathrm{c}$ <br> To Equity share capital A/c <br> (Share first and final call money due) |  | 2,00,000 | 2,00,000 |
|  | Bank A/c <br> To Equity share first and final call A/c <br> (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. | $\underset{₹}{\text { Debit }}$ | $\underset{₹}{\text { Credit }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c ( $65,000 \times 4)$ <br> To Equity share application A/c (Application money received) |  | 2,60,000 | 2,60,000 |
|  | Equity share application A/c ( $50,000 \times 4$ ) <br> To Equity share capital A/c <br> (Transfer of share application money to share capital) |  | 2,00,000 | 2,00,000 |
|  | Equity share application A/c (15,000 $\times 4$ ) <br> To Equity share allotment A/c <br> (Excess share application money utilised for allotment) |  | 60,000 | 60,000 |
|  | Equity share allotment $\mathrm{A} / \mathrm{c}$ <br> To Equity share capital A/c <br> (Share allotment money due) |  | 2,00,000 | 2,00,000 |
|  | Bank A/c (2,00,000-60,000) <br> To Equity share allotment A/c <br> (Allotment money received) |  | 1,40,000 | 1,40,000 |
|  | Equity share first and final call A/c $(50,000 \times 2)$ <br> To Equity share capital A/c <br> (Share first and final call money due) |  | 1,00,000 | 1,00,000 |
|  | Bank A/c <br> To Equity share first and final call A/c <br> (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. | $\underset{\text { ₹ }}{\text { Debit }}$ | Credit $₹$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c (1,40,000 $\times 3$ ) <br> To Equity share application $\mathrm{A} / \mathrm{c}$ <br> (Application money received) | Dr. |  | 4,20,000 | 4,20,000 |
|  | Equity share application $A / c(1,00,000 \times 3)$ <br> To Equity share capital A/c <br> (Transfer of share application money to share capital) | Dr. |  | 3,00,000 | 3,00,000 |
|  | Equity share application $\mathrm{A} / \mathrm{c}(5,000 \times 3)$ <br> To Bank A/c <br> (Excess application money refunded) | Dr. |  | 15,000 | 15,000 |
|  | Equity share application A/c $(35,000 \times 3)$ <br> To Equity share allotment A/c <br> (Excess share application money utilised for allotment) | Dr. |  | 1,05,000 | 1,05,000 |
|  | Equity share allotment A/c (1,00,000 $\times 4$ ) <br> To Equity share capital A/c <br> (Share allotment money due) | Dr. |  | 4,00,000 | 4,00,000 |
|  | Bank A/c <br> To Equity share allotment A/c <br> (Allotment money received) | Dr. |  | 2,95,000 | 2,95,000 |

## Working note:

| Shares <br> applied for | Shares <br> Allotted | Application <br> money received | Application <br> money | Appropriation <br> towards <br> 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 <br> $₹$ | Credit <br> $₹$ |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
|  | (a) For money received in advance on allotment and call <br> Bank A/c <br> To Call in advance A/c |  |  |  |  |
|  | (b) For adjusting towards call(s) <br> Calls in advance A/c <br> To Share call A/c | Dr. |  | xxx |  |
| l |  |  |  |  |  |

## 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. | $\underset{₹}{\text { Debit }}$ | Credit $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c $\quad(20,000 \times 4)$ <br> To Share application A/c <br> (Application money received) |  | 80,000 | 80,000 |
|  | Share application A/c <br> To Share capital A/c <br> (Application money transferred to share capital $\mathrm{A} / \mathrm{c}$ ) |  | 80,000 | 80,000 |
|  | Share allotment A/c $(20,000 \times 4)$ <br> To Share capital A/c <br> (Allotment money due) |  | 80,000 | 80,000 |
|  | Bank A/c $(20,000 \times 4)+(300 \times 2)$ <br> To Share allotment A/c <br> To Calls in advance A/c (300×2) <br> (Allotment money received) |  | 80,600 | $\begin{array}{r} 80,000 \\ 600 \end{array}$ |
|  | Share first and final call A/c $(20,000 \times 2)$ <br> To Share capital A/c <br> (First and final call money due) |  | 40,000 | 40,000 |
|  | Bank A/c (19,700 $\times 2$ ) <br> Calls in advance $\mathrm{A} / \mathrm{c}$ <br> To Share first and final call $\mathrm{A} / \mathrm{c}$ <br> (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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :--- | ---: | ---: | :---: |
|  | Equity share first and final call A/c (15,000 $\times 2)$ <br> To Share capital A/c <br> (Share first and final call money due) | Dr. | 30,000 |  |
|  | Bank A/c $(14,900 \times 2)$ <br> Calls in arrear A/c $(100 \times 2)$ <br> To Equity share first and final call A/c <br> (Amount received on calls and amount not <br> received transferred to calls in arrear account) | Dr. | Dr. | 29,800 |

### 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) <br> Dr. <br> To Equity share allotment A/c (amount unpaid) <br> To Equity share call A/c (amount unpaid) <br> To Forfeited shares A/c (amount so far paid) <br> (Forfeiture of shares for non payment of allotment and call) |  | xxx | xxx <br> xxx <br> xxx |

## 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 $(500 \times 10)$ <br> To Equity share call A/c $(500 \times 2)$ <br> To Forfeited shares A/c (500×8) <br> (500 shares forfeited for non payment of call money) |  | 5,000 | $\begin{aligned} & 1,000 \\ & 4,000 \end{aligned}$ |

## 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. | $\underset{₹}{\text { Debit }}$ | Credit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Equity share capital A/c $\quad(20 \times 6)$ <br> To Equity share allotment $\mathrm{A} / \mathrm{c}(20 \times 3)$ <br> To Equity share first call A/c $(20 \times 1)$ <br> To Forfeited shares A/c $(20 \times 2)$ <br> (Shares forfeited) | Dr. |  | 120 | 60 20 40 |

## 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. | $\underset{₹}{\text { Debit }}$ | Credit ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (i) When reissue is made at par <br> Bank A/c <br> To Equity share capital A/c | Dr. |  | xxx | xxx |
|  | (ii) When reissue is made at premium Bank A/c <br> To Equity share capital A/c <br> To Securities premium A/c | Dr. |  | xxx | $\begin{aligned} & \mathrm{xxx} \\ & \mathrm{xxx} \end{aligned}$ |
|  | (iii) When reissue is made at loss <br> Bank A/c <br> Forfeited shares $\mathrm{A} / \mathrm{c}$ (loss on reissue) <br> To Equity share capital A/c | Dr. Dr. |  | $\begin{aligned} & \mathrm{xxx} \\ & \mathrm{xxx} \end{aligned}$ | 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 <br> $₹$ | Credit <br> $₹$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Forfeited shares A/c <br> To Capital reserve A/c | Dr. |  | 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:

| Total amount forfeited |
| :---: |
| Total number of shares forfeited |$\times$ 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 $\quad(200 \times 10)$ <br> To Equity share final call A/c $(200 \times 3)$ <br> To Forfeited shares A/c $(200 \times 7)$ <br> (200 shares forfeited) | Dr. |  | 2,000 | $\begin{array}{r} 600 \\ 1,400 \end{array}$ |
|  | Bank A/c $(200 \times 6)$ <br> Forfeited shares A/c $(200 \times 4)$ <br> $\quad$ To Share capital A/c $(200 \times 10)$ <br> (Forfeited shares reissued)  | $\begin{aligned} & \text { Dr. } \\ & \text { Dr. } \end{aligned}$ |  | $\begin{array}{r} 1,200 \\ 800 \end{array}$ | 2,000 |
|  | Forfeited shares A/c $(1,400-800)$ <br> To Capital reserve A/c <br> (Gain on reissue of forfeited shares transferred to capital reserve account) | Dr. |  | 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 <br> ₹ | Credit <br> ₹ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Equity share capital A/c $(150 \times 10)$ <br> To Equity share final call A/c $(150 \times 4)$ <br> To Forfeited shares A/c $(150 \times 6)$ <br> $(50$ shares forfeited $)$  | Dr. |  | 1,500 | $\begin{aligned} & 600 \\ & 900 \end{aligned}$ |
|  | Bank A/c $(100 \times 9)$ <br> Forfeited shares A/c $(100 \times 1)$ <br> To Equity share capital A/c $(100 \times 10)$ <br> $(100$ forfeited shares reissued @ ₹ 9 per share $)$  | Dr. <br> Dr. |  | $\begin{aligned} & 900 \\ & 100 \end{aligned}$ | 1,000 |


|  | Forfeited shares A/c <br> To Capital reserve A/c <br> (Gain on reissue of forfeited shares transferred to capital <br> reserve account) | Dr. | 500 | 500 |
| :--- | :--- | :--- | :--- | :--- |

## 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 $\quad=₹ 500$

## 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 $(20 \times 7)$ Dr. <br> To Equity share first call A/c $(20 \times 2)$  <br> To Forfeited shares A/c $(20 \times 5)$  <br> (Forfeiture of 20 shares, ₹ 7 called up)   |  | 140 | $\begin{array}{r} 40 \\ 100 \end{array}$ |
|  | $\left.\begin{array}{lll}\text { Bank A/c } & (15 \times 6) & \text { Dr. } \\ \text { Forfeited shares A/c } & & \text { Dr. } \\ \text { To Equity share capital A/c } & (15 \times 7) & \\ \text { (Reissue of } 15 \text { forfeited shares @ ₹ } 6 \text { per share) } & \end{array} . \begin{array}{ll}\text { R } & \\ \hline\end{array}\right)$ |  | 90 15 | 105 |
|  | Forfeited shares A/c <br> To Capital reserve A/c <br> (Gain on reissue of forfeited shares transferred to capital reserve account) |  | 60 | 60 |

Note: Computation of transfer to capital reserve
$\begin{aligned} & \text { Forfeited amount for reissued shares of } 15 \\ & \text { Less: Loss on }\end{aligned}=\frac{100}{20} \times 15=75$
Less: Loss on reissue
Transfer to capital reserve $\frac{15}{60}$
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. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\begin{gathered} \text { Credit } \\ ₹ \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c ( $10,000 \times 3)$ <br> To Equity share application A/c <br> (Application money received) |  | 30,000 | 30,000 |
|  | Equity share application A/c <br> To Equity share capital A/c <br> (Application money transferred to share capital $\mathrm{A} / \mathrm{c}$ ) |  | 30,000 | 30,000 |
|  | Equity share allotment A/c ( $10,000 \times 3$ ) <br> To Equity share capital A/c <br> (Allotment money due) |  | 30,000 | 30,000 |
|  | Bank A/c (10,000×3) <br> To Equity share allotment A/c <br> (Allotment money received) |  | 30,000 | 30,000 |
|  | Equity share first call A/c $(10,000 \times 2)$ <br> To Equity share capital A/c <br> (First call money due) |  | 20,000 | 20,000 |
|  | Bank A/c (10,000 $\times 2$ ) <br> To Equity share first call A/c <br> (First call money received) |  | 20,000 | 20,000 |
|  | Equity share second and final call A/c ( $10,000 \times 2$ ) <br> To Equity share capital A/c <br> (Second and final call money due) |  | 20,000 | 20,000 |
|  | Bank A/c (9,900 $\times 2$ ) <br> To Equity share second and final call $\mathrm{A} / \mathrm{c}$ <br> (Second and final call money received) |  | 19,800 | 19,800 |



## Illustration 14

X company issued 10,000 equity shares of $₹ 10$ each payable as under:

| On application | $₹ 2$ |
| :--- | :--- |
| On allotment | $₹ 4$ |
| On first call | $₹ 22$ |
| 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 <br> Journal entries

| Date | Particulars | L.F. | $\begin{gathered} \text { Debit } \\ \text { ₹ } \end{gathered}$ | Credit <br> ₹ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c (30,000 $\times 2$ ) <br> To Equity share application A/c <br> (Application money received on 30,000 shares @ ₹ 2 per share) |  | 60,000 | 60,000 |
|  | Equity share application A/c ( $10,000 \times 2$ ) <br> To Equity share capital A/c <br> (Share application transferred to share capital) |  | 20,000 | 20,000 |
|  | Equity share application A/c <br> To Bank A/c ( $10,000 \times 2$ ) <br> To Equity share allotment A/c ( $10,000 \times 2$ ) <br> (Application money refunded for rejected applications and excess application money adjusted towards allotment) |  | 40,000 | $\begin{aligned} & 20,000 \\ & 20,000 \end{aligned}$ |


| Equity share Allotment A/c ( $10,000 \times 4$ ) <br> To Equity share capital A/c <br> (Allotment money due) | Dr. | 40,000 | 40,000 |
| :---: | :---: | :---: | :---: |
| Bank A/c (40,000-20,000) <br> To Equity share allotment A/c <br> (Allotment money received) | Dr. | 20,000 | 20,000 |
| Equity share first call A/c ( $10,000 \times 2$ ) <br> To Equity share capital A/c <br> (First call money due) | Dr. | 20,000 | 20,000 |
| Bank A/c <br> To Equity share first call A/c <br> (First call money received) | Dr. | 20,000 | 20,000 |
| Equity share second and final call $\mathrm{A} / \mathrm{c}(10,000 \times 2)$ <br> To Equity share capital A/c <br> (Share second and final call due) | Dr. | 20,000 | 20,000 |
| Bank A/c (9, 400 $\times 2$ ) <br> To Equity share second and final call $\mathrm{A} / \mathrm{c}$ <br> (Second and final call money received on 9,400 shares) | Dr. | 18,800 | 18,800 |
| Equity share capital A/c ( $600 \times 10$ ) <br> To Equity share second and final call $\mathrm{A} / \mathrm{c}(600 \times 2)$ <br> To Forfeited shares A/c $(600 \times 8)$ <br> (Shares forfeited for nonpayment of final call money) |  | 6,000 | $\begin{aligned} & 1,200 \\ & 4,800 \end{aligned}$ |
| Bank A/c ( $400 \times 7$ ) <br> Forfeited shares A/c ( $400 \times 3$ ) <br> To Equity share capital A/c <br> (400 forfeited shares reissued at ₹ 7 per share) | $\begin{aligned} & \text { Or. } \\ & \text { Or. } \end{aligned}$ | $\begin{aligned} & 2,800 \\ & 1,200 \end{aligned}$ | 4,000 |
| Forfeited shares A/c <br> To Capital reserve A/c <br> (Gain on reissue credited to capital reserve $\mathrm{A} / \mathrm{c}$ ) |  | 2,000 | 2,000 |

## Working note:

Amount forfeited for 600 shares $=₹ 4,800$
Amount forfeited for 400 shares $=\frac{4,800}{600} \times 400 \quad ₹ 3,200$

| Less: Loss on reissue | 1,200 |
| :--- | :--- |
| 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 <br> ₹ | Credit ₹ |
| :---: | :---: | :---: | :---: | :---: |
|  | (i) If premium is collected with application money <br> (a) For receiving application money (application money + premium) Bank A/c <br> To Equity share application A/c |  | xxx | xxx |
|  | (b) For transfer of application money <br> Equity share application $\mathrm{A} / \mathrm{c}$ <br> To Equity share capital A/c <br> To Securities premium A/c |  | xxx | Xxx Xxx |
|  | (ii) If premium is collected with allotment money/call money <br> (a) For allotment/ call money due (allotment/call money + premium) <br> Equity share allotment/call A/c <br> To Equity share capital A/c <br> To Securities premium A/c |  | xxx | xxx xxx |
|  | (b) For receiving allotment/call money Bank A/c <br> To Equity share allotment/call A/c |  | xxx | Xxx |
|  | (iii) When shares are forfeited (for which premium is not received) <br> Equity share capital A/c <br> Securities premium A/c <br> To Equity share allotment A/c <br> To Equity share call A/c <br> To Forfeited shares A/c |  | xxx xxx | Xxx xxx 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 os Shero Health Care Ltd <br> Journal entries

| Date | Particulars | L.F. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\begin{aligned} & \text { Credit } \\ & \text { ₹ } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c (4,00,000 $\times 3$ ) <br> To Equity share application A/c <br> (Application money on $4,00,000$ shares @ ₹ 3 per share received) |  | 12,00,000 | 12,00,000 |
|  | Equity share application A/c $(3,00,000 \times 3)$ <br> To Equity share capital A/c <br> (Share application transferred to share capital) |  | 9,00,000 | 9,00,000 |
|  | Equity share application A/c $(1,00,000 \times 3)$ <br> To Bank A/c <br> (Money refunded for rejected applications) |  | 3,00,000 | 3,00,000 |
|  | Equity share allotment $\mathrm{A} / \mathrm{c} \quad(3,00,000 \times 5)$ <br> To Equity share capital A/c (3,00,000 $\times 3$ ) <br> To Securities premium A/c (3,00,000 $\times 2$ ) <br> (Share allotment money ₹ 5 per share including ₹ 2 premium receivable for $3,00,000$ shares) |  | 15,00,000 | $\begin{aligned} & 9,00,000 \\ & 6,00,000 \end{aligned}$ |
|  | Bank A/c $\quad(3,00,000 \times 5)$ <br> To Equity share allotment A/c <br> (Allotment money received) |  | 15,00,000 | 15,00,000 |
|  | Equity share first and final call A/c <br> To Equity share capital A/c (3,00,000×4) <br> (Call money receivable) |  | 12,00,000 | 12,00,000 |


|  | Bank A/c <br> To Equity share first and final call A/c <br> (Call money received) | Dr. | $12,00,000$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

## 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:
(i) Mohan who holds 50 shares failed to pay the second and final call and his shares were forfeited.
(ii) Mohan who holds 50 shares failed to pay the allotment money, first call and second and final call money and his shares were forfeited.
(iii) 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 $(50 \times 10)$ Dr. <br> To Equity share second and final call A/c $(50 \times 3)$  <br> To Forfeited shares A/c $(50 \times 7)$  <br> $(50$ shares forfeited $)$   |  | 500 | 150 350 |

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. | $\begin{gathered} \text { Debit } \\ ₹ \end{gathered}$ | $\begin{aligned} & \text { Credit } \\ & \text { ₹ } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Share capital A/c $(50 \times 10)$ <br> Securities premium A/c $(50 \times 1)$ <br> To Share allotment A/c $(50 \times 3)$ <br> To Share first call A/c $(50 \times 3)$ <br> To Share second and final call A/c $(50 \times 3)$  <br> To Shares forfeited A/c $(50 \times 2)$ <br> $(50$ shares forfeited $)$  | Dr. |  | 500 |  |
|  |  | Dr. |  | 50 |  |
|  |  |  |  |  | 150 |
|  |  |  |  |  | 150 |
|  |  |  |  |  | 150 |
|  |  |  |  |  | 100 |
|  |  |  |  |  |  |

(iii) When allotment and first call money is not paid

| Date | Particulars |  | L.F. | Debit ₹ | $\underset{₹}{\text { Credit }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Share capital A/c $(50 \times 7)$ <br> Securities premium A/c $(50 \times 1)$ <br> To Share allotment A/c $(50 \times 3)$ <br> To Share first call A/c $(50 \times 3)$ <br> To Shares forfeited A/c $(50 \times 2)$ <br> (50 shares forfeited)  | Dr. |  | 350 |  |
|  |  | Dr. |  | 50 |  |
|  |  |  |  |  | 150 |
|  |  |  |  |  | 150 |
|  |  |  |  |  | 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) <br> To Equity share application A/c <br> (Application money for 14,000 shares received) |  |  |  | 28,000 | 28,000 |
|  | Equity share application $\mathrm{A} / \mathrm{c}(10,000 \times 2)$ <br> To Equity share capital A/c <br> (Application money transferred to share capital) |  |  |  | 20,000 | 20,000 |
|  | Equity share application $\mathrm{A} / \mathrm{c}(4,000 \times 2)$ <br> To Equity share allotment $\mathrm{A} / \mathrm{c}$ <br> (Excess application money adjusted towards allotment) |  |  |  | 8,000 | 8,000 |
|  | Equity share allotment A/c <br> To Equity share capital A/c <br> To Securities premium A/c <br> (Allotment money due) | $\begin{aligned} & (10,000 \times 5) \\ & (10,000 \times 3) \\ & (10,000 \times 2) \end{aligned}$ | Dr. |  | 50,000 | $\begin{aligned} & 30,000 \\ & 20,000 \end{aligned}$ |
|  | Bank A/c (50,000-8,000) <br> To Equity share allotment A/c <br> (Allotment money received) |  |  |  | 42,000 | 42,000 |



## 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 $\quad 800$

## Illustration 18

Thangam Ltd. issued 50,000 equity shares of $₹ 10$ each at a premium of $₹ 2$ per share payable as follows:

On application
On allotment
On first and final call
₹ 5 (including premium)
₹ 2

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 fist 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 $\times 5$ ) <br> To Equity share application A/c <br> (Application money received) | Dr. |  | 2,50,000 | 2,50,000 |
|  | Equity share application $\mathrm{A} / \mathrm{c}$ <br> To Equity share capital A/c <br> (Transfer of application money to share capital) | Dr. |  | 2,50,000 | 2,50,000 |
|  | Equity share allotment A/c $(50,000 \times 5)$ <br> To Equity share capital A/c $(50,000 \times 3)$ <br> To Securities premium A/c (50,000×2) <br> (Allotment money due) | Dr. |  | 2,50,000 | $\begin{aligned} & 1,50,000 \\ & 1,00,000 \end{aligned}$ |
|  | Bank A/c (49,500×5) <br> To Equity share allotment $\mathrm{A} / \mathrm{c}$ <br> (Allotment money received except on 500 shares ) | Dr. |  | 2,47,500 | 2,47,500 |
|  | Equity share first and final call A/c (50,000 $\times 2$ ) <br> To Equity share capital A/c <br> (First and final call money due) | Dr. |  | 1,00,000 | 1,00,000 |
|  | Bank A/c (49,500 $\times 2$ ) <br> To Equity share first and final call $\mathrm{A} / \mathrm{c}$ (First and final call money received) | Dr. |  | 99,000 | 99,000 |
|  | Equity share capital A/c ( $500 \times 10$ ) <br> Securities Premium A/c (500×2) <br> To Equity share allotment $\mathrm{A} / \mathrm{c}(500 \times 5)$ <br> To Equity share first and final call A/c (500 $\times 2$ ) <br> To Forfeited shares A/c (500×5) <br> (500 shares forfeited for nonpayment of allotment and first and final call money) | Dr. <br> Dr. |  | $\begin{aligned} & 5,000 \\ & 1,000 \end{aligned}$ | $\begin{aligned} & 2,500 \\ & 1,000 \\ & 2,500 \end{aligned}$ |
|  | Bank A/c (500×8) <br> Forfeited shares A/c (500 $\times 2$ ) <br> To Equity share capital A/c (500 $\times 10$ ) <br> (500 forfeited shares reissued) | Dr. <br> Dr. |  | $\begin{aligned} & 4,000 \\ & 1,000 \end{aligned}$ | 5,000 |


|  | Forfeited shares A/c (2,500-1,000)  <br> To Capital reserve A/c <br> (Gain on reissue of forfeited shares transferred to capital <br> reserve) Dr. | 1,500 | 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 <br> $₹$ | Credit <br> $₹$ |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | (i) For receipt of application money <br> Bank A/c <br> To Equity share application A/c | Dr. |  | xxx |  |
|  | (ii) For transfer of application money <br> Equity share application A/c <br> To Equity share capital A/c <br> To Securities premium A/c (if issued at premium) | Dr. |  | xxx | 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 <br> Journal entries

## (i) Issued at par

| Date | Particulars | L.F. | Debit <br> $₹$ | Credit <br> $₹$ |  |
| :--- | :--- | ---: | :---: | :---: | :---: |
|  | Bank A/c (10,000 x10) <br> To Equity share application A/c <br> (Application money received) | Dr. | $1,00,000$ |  |  |
|  | Equity share application A/c <br> To Equity share capital A/c <br> (Application money transferred to share capital) | Dr. |  | $1,00,000$ | 1,000 |

(ii) Issued at a premium

| Date | Particulars | L.F. | $\begin{aligned} & \text { Debit } \\ & \text { ₹ } \end{aligned}$ | $\begin{gathered} \text { Credit } \\ \text { ₹ } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Bank A/c (10,000 $\times 12$ ) <br> To Equity share application A/c <br> (Application money received) |  | 1,20,000 | 1,20,000 |
|  | Equity share application $\mathrm{A} / \mathrm{c}$ <br> To Equity share capital A/c $(10,000 \times 10)$ <br> To Securities premium A/c (10,000×2) <br> (Application money transferred to share capital) |  | 1,20,000 | $\begin{array}{r} 1,00,000 \\ 20,000 \end{array}$ |

### 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. | $\begin{gathered} \text { Debit } \\ \text { ₹ } \end{gathered}$ | $\begin{aligned} & \text { Credit } \\ & \text { ₹ } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | (i) For purchase of asset <br> Respective asset A/c <br> To Vendor A/c |  | xxx | xxx |
|  | (ii) For issue of shares <br> Vendor $\mathrm{A} / \mathrm{c}$ <br> To Equity share capital A/c <br> 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 <br> $₹$ | Credit <br> $₹$ |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
|  | Machinery A/c <br> To Jagan Traders A/c <br> (Purchase of machinery)Jagan Traders A/c <br> To Equity share capital A/c <br> (Issue of 60,000 shares of ₹ 10 each fully paid) |  | $6,00,000$ | Dr. | $6,00,000$ |

(b) When shares are issued at a premium of $\mathbf{5 0 \%}$

| Date | Particulars | L.F. | $\begin{gathered} \text { Debit } \\ \text { ₹ } \end{gathered}$ | Credit <br> ₹ |
| :---: | :---: | :---: | :---: | :---: |
|  | Machinery A/c <br> To Jagan Traders A/c <br> (Purchase of machinery) |  | 6,00,000 | 6,00,000 |
|  | Jagan Traders A/c <br> To Equity share capital A/c $(40,000 \times 10)$ <br> To Securities premium A/c $(40,000 \times 5)$ <br> (Issue of 40,000 shares of ₹ 10 each at a premium of $50 \%$ ) |  | 6,00,000 | $\begin{aligned} & 4,00,000 \\ & 2,00,000 \end{aligned}$ |

## 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

| $1(\mathrm{c})$ | 2(d) | 3(d) | (b) | (a) | 6(b) | 7(c) | 8(c) | 9(d) | 10(a) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## I I 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 Chezhian, 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. | $\begin{gathered} \text { Dr. } \\ \text { ₹ } \end{gathered}$ | $\begin{aligned} & \text { Cr. } \\ & \text { ₹ } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1. | To Share application A/c <br> (Application money received @ 2 per share) |  | 2,00,000 |  |
| 2. | Share application A/c <br> Dr. <br> To Share capital A/c <br> (Share application money for $\qquad$ shares transferred to ) $\qquad$ |  |  | 2,00,000 |

Mala and Mary entered into a partnership business. The performance and profitably 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?

## Reference

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3. Fundamentals of Accounting, 2017, The Institute of Chartered Accountants of India, New Delhi. ANALYSIS

| 8.1 | Contents |
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| 8.2 | Introduction |
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| 8.5 | Tools of financial statement <br> analysis <br> 8.6 |
| Preparation of comparative <br> statements |  |
| 8.7 | Preparation of common size <br> statements |
| 8.8 | Trend analysis |



The following points are to be recalled before learning financial statement analysis:
$\stackrel{\wedge}{ }$ Accounting principles
$\stackrel{\rightharpoonup}{ }$ Indian Accounting Standards
$\stackrel{\text { Preparation of profit and loss }}{ }$ account and balance sheet
To enable the students to

$\stackrel{\text { Understand the meaning and }}{ }$| objectives of financial statement |
| :--- |
| analysis |

$\stackrel{\text { Understand the tools of financial }}{ }$ statement analysis

$\stackrel{\text { Apply the tools to analyse the }}{ }$| financial statements |
| :--- |


| Key terms to know |  |
| :---: | :---: |
| $\stackrel{\text { - Financial statements }}{ }$ |  |
| ¢ Financial statement analysis |  |
| ¢ Common size statement |  |
| - Comparative statement |  |
| $\stackrel{\text { - Trend analysis }}{ }$ | 回 |
|  |  |

### 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.
<|||||| 265 ||||||
(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 <br> PART II - STATEMENT OF PROFIT AND LOSS

Name of the Company
Profit and loss statement for the year ended $\qquad$
(Rupees in $\qquad$

|  | 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 |  | xxx | xxx |
|  | 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 $\qquad$

| Particulars | Note <br> No. | Figures as at the <br> end of current <br> reporting period | Figures as at the <br> end of previous <br> reporting period |
| :--- | :---: | :---: | :---: |
|  | 2 | 3 | 4 |
| I. EQUITY AND LIABILITIES <br> 1. Shareholders' funds <br> a) Share capital <br> b) Reserves and Surplus <br> c) Money received against share warrants |  |  |  |
| 2. Share application money pending allotment <br> 3. Non-current liabilities <br> a) Long-term borrowings <br> b) Deferred tax liabilities (Net) <br> c) Other long term liabilities <br> d) Long-term provisions <br> 4. Current liabilities |  |  |  |
| a) Short-term borrowings |  |  |  |
| b) Trade payables |  |  |  |
| c) Other current liabilities |  |  |  |
| d) Short-term provisions |  |  |  |

## II. ASSETS

1. Non-current assets
a) Fixed assets
i) Tangible assets
ii) Intangible assets
iii) Capital Work-in-progress
iv) Intangible assets under development
b) Non-current investments
c) Deferred tax assets ( Net)
d) Long-term loans and advances
e) Other non-current assets

## 2. Current assets

a) Current investments
b) Inventories
c) Trade receivables
d) Cash and cash equivalents
e) Short-term loans and advances
f) Other current assets

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 <br> rupees | To the nearest hundreds, thousands, lakhs <br> or millions, or decimals thereof. |
| (b) one hundred crore rupees or <br> more | To the nearest lakhs, millions or crores, or <br> 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,

Percentage increase or decrease $=\underline{\text { Absolute amount of increase or decrease } \times 100}$
Year 1 amount

## Format of comparative statement

| Particulars | Year 1 | Year 2 | Absolute amount <br> of increase (+) or <br> decrease (-) | Percentage increase <br> (+) 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.

## I Ilustration 1

From the following particulars, prepare comparative income statement of Tharun Co. Ltd.

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | ---: | ---: |
|  | $₹$ | $₹$ |
| 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 ${ }^{\text {st }}$ March, 2017 and 31 ${ }^{\text {st }}$ March, 2018

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | Absolute amount <br> of increase $(+)$ or <br> decrease $(-)$ | Percentage <br> increase $(+)$ or <br> 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
$\frac{\text { Absolute amount of increase or decrease }}{\text { Year } 1 \text { amount }} \times 100=\frac{50,000}{2,00,000} \times 100=25 \%$

## 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.

## I Ilustration 2

From the following particulars, prepare comparative income statement of Abdul Co. Ltd.

| Particulars | 2015-16 <br> $₹$ | 2016-17 <br>  |
| :--- | ---: | ---: |
| 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
$31^{\text {st }}$ March, 2016 and 31 ${ }^{\text {st }}$ March, 2017

| Particulars | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | Absolute amount <br> of increase (+) or <br> decrease (-) | Percentage <br> increase (+) or <br> 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 |

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## 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 ${ }^{\text {st }}$ March, 2016 and 31 ${ }^{\text {st }}$ 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 x $20 \%=₹ \quad 40,000$
For 2016-17: 3,20,000 x $50 \%=₹ 1,60,000$

## I Ilustration 4

From the following balance sheet of Chandra Ltd, prepare comparative balance sheet as on $31^{\text {st }}$ March 2016 and $31^{\text {st }}$ March 2017.

| Particulars | $3^{\text {st }}$ March 2016 | 31 ${ }^{\text {st }}$ March 2017 |
| :--- | ---: | ---: |
|  | ₹ | $₹$ |
| I EQUITY AND LIABILITIES |  |  |
| Shareholders' fund | $1,00,000$ | $2,60,000$ |
| Non-current liabilities | 50,000 | 60,000 |
| Current liabilities | 25,000 | 30,000 |
| Total | $1,75,000$ | $3,50,000$ |
| II ASSETS |  |  |
| 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 ${ }^{\text {st }}$ March 2016 and 31 ${ }^{\text {st }}$ March 2017

| Particulars | 2015-16 | 2016-17 | Absolute amount of increase ( +) or decrease (-) | Percentage increase (+) or decrease (-) |
| :---: | :---: | :---: | :---: | :---: |
|  | ₹ | ₹ | ₹ |  |
| I EQUITY AND LIABILITIES |  |  |  |  |
| 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 |
| II ASSETS |  |  |  |  |
| 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 |

## I Ilustration 5

From the following particulars, prepare comparative balance sheet of Malar Ltd as on $31^{\text {st }}$ March 2016 and $31^{\text {st }}$ March 2017.

| Particulars | 31 ${ }^{\text {st }}$ March 2016 | 31 ${ }^{\text {st }}$ March 2017 |
| :---: | :---: | :---: |
|  | ₹ | ₹ |
| I EQUITY AND LIABILITIES |  |  |
| 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 |
| II ASSETS |  |  |
| 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 ${ }^{\text {st }}$ March 2016, and 31 ${ }^{\text {st }}$ March 2017

| Particulars | 2015-16 | 2016-17 | Absolute amount of increase ( + ) or decrease (-) | Percentage increase (+) or decrease (-) |
| :---: | :---: | :---: | :---: | :---: |
|  | ₹ | ₹ | ₹ |  |
| I EQUITY AND LIABILITIES |  |  |  |  |
| 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 |
| II ASSETS |  |  |  |  |
| 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 |
| :---: | :---: | :---: |
|  |  |  |

## I Ilustration 6

From the following particulars of Kumar Ltd, prepare a common-size income statement for the year ended $31^{\text {st }}$ March, 2018.

| Particulars | $\mathbf{2 0 1 7 - 1 8}$ |
| :--- | ---: |
|  | $₹$ |
| 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 ${ }^{\text {st }}$ March, 2018

| Particulars | Absolute amount | Percentage of <br> revenue from <br> operations |
| :--- | ---: | ---: |
|  | $₹$ | 100 |
| Revenue from operations | $5,00,000$ | 4 |
| Add: Other income | 20,000 | 104 |
| Total revenue | $5,20,000$ | 60 |
| Less: Expenses | $3,00,000$ | 44 |
| Profit before tax | $2,20,000$ |  |
|  |  |  |

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 an Kani Ltd prepare a common-size income statement for the year ended $31^{\text {st }}$ 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 ${ }^{\text {st }}$ 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 |

## I Ilustration 8

From the following particulars of Siva Ltd, prepare common size income statement for the years ended $31^{\text {st }}$ March, 2016 and $31^{\text {st }}$ 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 ${ }^{\text {st }}$ March, 2016 and 31 ${ }^{\text {st }}$ 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 $31^{\text {st }}$ March, 2018.

| Particulars | $\mathbf{3 1}^{\text {st }}$ March 2018 |
| :--- | ---: |
|  | $₹$ |
| I EQUITY AND LIABILITIES |  |
| Shareholders' funds | $4,00,000$ |
| Non-current liabilities | $3,20,000$ |
| Current liabilities | 80,000 |
| Total | $8,00,000$ |
| II ASSETS |  |
| 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 ${ }^{\text {st }}$ March, 2018

| Particulars | Absolute amount | Percentage of total assets |
| :---: | :---: | :---: |
|  | ₹ |  |
| I EQUITY AND LIABILITIES |  |  |
| Shareholders' funds | 4,00,000 | 50 |
| Non-current liabilities | 3,20,000 | 40 |
| Current liabilities | 80,000 | 10 |
| Total | 8,00,000 | 100 |
| II ASSETS |  |  |
| Non-current assets | 6,00,000 | 75 |
| Current assets | 2,00,000 | 25 |
| Total | 8,00,000 | 100 |

## I Ilustration 10

Prepare common-size balance sheet of Sharmila Ltd. and Sangeetha Ltd. as on $31^{\text {st }}$ March, 2019.

| Particulars | Sharmila Ltd | Sangeetha Ltd |
| :--- | ---: | ---: |
|  | $₹$ | $₹$ |
| I EQUITY AND LIABILITIES |  |  |
| 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 | $10,00,000$ | $20,00,000$ |
| II ASSETS |  |  |
| 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 ${ }^{\text {st }}$ March, 2019

| Particulars | Sharmila Ltd |  | Sangeetha Ltd |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Absolute amount | Percentage of total assets | Absolute amount | Percentage of total assets |
|  | ₹ |  | ₹ |  |
| I EQUITY AND LIABILITIES |  |  |  |  |
| 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 |
| II ASSETS |  |  |  |  |
| 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 |

## I Ilustration 11

Prepare common-size statement of financial position of Saleem Ltd as on 31 ${ }^{\text {st }}$ March, 2017 and $31^{\text {st }}$ March, 2018.

| Particulars | $3^{\text {st }}$ March2017 | $\mathbf{3 1}^{\text {st }}$ March 2018 |
| :--- | ---: | ---: |
|  | $₹$ | ₹ |
| I EQUITY AND LIABILITIES |  |  |
| 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 | $20,00,000$ | $12,00,000$ |
|  |  |  |
| II ASSETS |  |  |
| 1. Non-current assets | $10,00,000$ | $6,00,000$ |
| a) Fixed assets | $5,00,000$ | $2,40,000$ |
| b) Non - current investments |  |  |
| 2. Current assets | $3,00,000$ | $1,20,000$ |
| Inventories | $2,00,000$ | $2,40,000$ |
| Cash and cash equivalents | $20,00,000$ | $12,00,000$ |

## Solution

## Common-size balance sheet of Saleem Ltd as on $31^{\text {st }}$ March, 2017 and 31 ${ }^{\text {st }}$ March, 2018

| Particulars | Absolute amount on $31^{\text {st }}$ March 2017 ₹ | Percentage of total assets on 31 ${ }^{\text {st }}$ March 2017 | Absolute amount on $31^{\text {st }}$ March 2018 ₹ | Percentage of total assets on 31 ${ }^{\text {st }}$ March 2018 |
| :---: | :---: | :---: | :---: | :---: |
| I EQUITY AND LIABILITIES |  |  |  |  |
| 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 |
| II ASSETS |  |  |  |  |
| 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:
(i) Take the earliest year as the base year.
(ii) Take the figures for the base year as 100 .
(iii) Express the figures for the other years as a percentage to the base year and determine the trend.

## I Ilustration 12

Calculate trend percentages for the following particulars of Kurinji Ltd.

| Particulars | ₹ in thousands |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | 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:
For 2016-17: $\frac{132}{120} \times 100=110 \%$
For 2017-18: $\frac{156}{120} \times 100=130 \%$

## I Ilustration 13

From the following information, calculate trend percentages for Mullai Ltd.

| Particulars | ₹ in lakhs |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 5 - 1 6}$ |  | 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 |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| 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 |
|  |  |  |  |  |  |  |

## I Ilustration 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 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ |
| 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 |

## I Ilustration 15

Calculate trend percentages for the following particulars of Palai Ltd.

| Particulars | $₹$ in lakhs |  |  |
| :--- | ---: | ---: | ---: |
|  | Year 1 | Year 2 | Year 3 |
| I EQUITY AND LIABILITIES |  |  |  |
| Shareholders' fund | 250 | 275 | 300 |
| Non-current liabilities | 100 | 125 | 100 |
| Current liabilities | 50 | 40 | 80 |
| Total | 400 | 440 | 480 |
| II ASSETS |  |  |  |
| Non-current assets | 300 | 360 | 390 |
| Current assets | 100 | 80 | 90 |
| Total | 400 | 440 | 480 |

Trend analysis for Palai Ltd

| Particulars | ₹ in lakhs |  |  | Trend percentages |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year 1 | Year 2 | Year 3 | Year 1 | Year 2 | Year 3 |
| I EQUITY AND LIABILITIES |  |  |  |  |  |  |
| 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 |
| II ASSETS |  |  |  |  |  |  |
| Non-current assets | 300 | 360 | 390 | 100 | 120 | 130 |
| Current assets | 100 | 80 | 90 | 100 | 80 | 90 |
| Total | 400 | 440 | 480 | 100 | 110 | 120 |

## I llustration 16

Compute trend percentages for the following particulars of Boomi Ltd.

| Particulars | ₹ in lakhs |  |  |
| :---: | :---: | :---: | :---: |
|  | Year 1 | Year 2 | Year 3 |
| I EQUITY AND LIABILITIES |  |  |  |
| 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 |
| II ASSETS |  |  |  |
| 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 |

## Trend analysis for Boomi Ltd

| Particulars | $₹$ in lakhs |  |  | Trend percentages |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Year 1 | Year 2 | Year 3 | Year 1 | Year 2 | Year 3 |
| I EQUITY AND LIABILITIES |  |  |  |  |  |  |
| 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 |
| II ASSETS |  |  |  |  |  |  |
| 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 <br> $₹$ | 2016-17 <br> $₹$ |
| :--- | ---: | ---: |
| 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 | $\mathbf{2 0 1 6 - 1 7}$ <br> $₹$ | $\mathbf{2 0 1 7 - 1 8}$ <br> $₹$ |
| :--- | ---: | ---: |
| 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: $\mathbf{5 0 \%}$; Profit before tax: 50\%; Tax: 50\% ; Profit after tax: 50\%)

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3. From the following particulars, prepare comparative income statement of Daniel Ltd.

| Particulars | 2015-16 <br> $₹$ | 2016-17 <br> $₹$ |
| :--- | ---: | ---: |
| 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 |
| :--- | ---: | ---: |
|  | $₹$ | $₹$ |
| I EQUITY AND LIABILITIES |  |  |
| Shareholders' Fund | $4,00,000$ | $4,40,000$ |
| Non-current liabilities | $1,50,000$ | $1,65,000$ |
| Current liabilities | 75,000 | 82,500 |
| Total | $6,25,000$ | $6,87,500$ |
| II ASSETS |  |  |
| 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: $\mathbf{1 0 \%}$ ) 5. From the following particulars, prepare comparative statement of financial position of Kala Ltd.

| Particulars | 31st March, 2017 | 31st March, 2018 |
| :---: | ---: | ---: |
|  | $₹$ |  |
| I EQUITY AND LIABILITIES |  |  |
| 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 |
| Total | $4,20,000$ | $4,62,000$ |

(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 $31^{\text {st }}$ March, 2017

| Particulars | $\mathbf{2 0 1 6 - 1 7}$ |
| :--- | ---: |
|  | $₹$ |
| 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 $31^{\text {st }}$ 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: $\mathbf{1 1 0 \%}$; Expenses: 70\%; Profit before tax: $\mathbf{4 0 \%}$
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 | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ |
| :--- | ---: | ---: |
|  | $₹$ | $₹$ |
| 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: $\mathbf{4 2 \%}$; 2016-17: Other income: $10 \%$; Total revenue: $110 \%$; Expenses: $\mathbf{5 0 \%}$; Profit before tax: 60\%: Tax: 18\%; Profit after tax: $\mathbf{4 2 \%}$ )
9. Prepare Common-size balance sheet of Meena Ltd. as on $31^{\text {st }}$ March, 2018.

| Particulars | $\mathbf{3 1}^{\text {st }}$ March 2018 |
| :--- | ---: |
|  | $₹$ |
| I EQUITY AND LIABILITIES |  |
| Shareholders' funds | $2,00,000$ |
| Non-current liabilities | $1,60,000$ |
| Current liabilities | 40,000 |
| Total | $4,00,000$ |
| II ASSETS |  |
| 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 |
| :--- | ---: | ---: |
|  | $₹$ | $₹$ |
| I EQUITY AND LIABILITIES |  |  |
| 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 | $9,00,000$ | $10,00,000$ |
| II ASSETS |  |  |
| 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: $\mathbf{8 0 \%}$; Current assets: $\mathbf{2 0 \%}$; 2016-17: Shareholder's fund: $\mathbf{6 0 \%}$; Noncurrent liabilities: $\mathbf{2 5 \%}$; Current liabilities: $15 \%$; Non-current assets: $\mathbf{8 0 \%}$; 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. |
| :---: | ---: | ---: |
|  | $₹$ | $₹$ |
| I EQUITY AND LIABILITIES |  |  |
| 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 <br> 1. Non-current assets

a) Fixed assets
b) Non - current investments
2. Current assets

Inventories
Cash and cash equivalents Total

|  |  |
| ---: | ---: |
| $2,00,000$ | $3,00,000$ |
| 50,000 | $1,20,000$ |
|  |  |
| $2,00,000$ | 90,000 |
| 50,000 | 90,000 |
| $5,00,000$ | $6,00,000$ |

(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 |  |  |  |
|  | 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 |
| 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: $\mathbf{1 5 0 \%}$; Other income: $\mathbf{1 5 0 \%}$; Total revenue: $150 \%$; Expenses: $\mathbf{8 0 \%}$; 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 |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{2 0 1 5 - 1 6}$ |  | $\mathbf{2 0 1 6 - 1 7}$ |
|  | $\mathbf{2 0 1 7 - 1 8}$ |  |  |
| 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: $\mathbf{8 0 \%}$; Profit before tax: $\mathbf{1 5 0 \%}$; 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 |
| I EQUITY AND LIABILITIES |  |  |  |
| Shareholders' Fund | 500 | 550 | 600 |
| Non-current liabilities | 200 | 250 | 240 |
| Current liabilities | 100 | 80 | 120 |
| Total | 800 | 880 | 960 |
|  |  |  |  |
|  |  | 720 |  |
| Non-current assets | 600 | 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: $\mathbf{1 1 0 \%}$; Non-current assets: $\mathbf{1 2 0 \%}$; Current assets: $\mathbf{8 0 \%}$; Total assets: $\mathbf{1 1 0 \%}$; Year 3: Shareholder's fund: 120\%; Non-current liabilities: 120\%; Current liabilities: 120\%; Total equity and liabilities: $\mathbf{1 2 0 \%}$; Non-current assets: $\mathbf{1 3 0 \%}$; Current assets: $\mathbf{9 0 \%}$; Total assets: $\mathbf{1 2 0 \%}$ )
16. From the following particulars, calculate the trend percentages of Babu Ltd.

| Particulars | $₹$ in thousands |  |  |
| :---: | :---: | :---: | :---: |
|  | Year 1 | Year 2 | Year 3 |
| I EQUITY AND LIABILITIES |  |  |  |
| 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 |
| II ASSETS |  |  |  |
| 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 equivalents | 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: $\mathbf{2 0 0} \%$; 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?

## Reference

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## RATIO ANALYSIS

| 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 |
|  |  |

## Learning objectives

To enable the students to
$\stackrel{\text { Understand the meaning and }}{ }$
Understand the meaning and
classification of accounting ratios

- Calculate various ratios


## 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


## Key terms to know

$\stackrel{\diamond}{ } \stackrel{\text { Ratio }}{ }$

- Ratio analysis
- Liquidity ratios
$\diamond$ Long term solvency ratios
- Profitability ratios
$\diamond$ Turnover ratios
$\diamond$ Shareholders' funds


### 9.1 I ntroduction

## 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:
(i) Pure: It is expressed as a quotient. Example: 2 or 2:1.
(ii) Percentage: It is expressed in percentage. Example: $25 \%$.
(iii) 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:

(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


Figure 9.2 Functional classification of ratios 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. |
| Current assets include <br> (i) Current investments <br> (ii) Inventories (stock) <br> (iii) Trade receivables (Bills receivable and sundry debtors less provision for doubtful debts) <br> (iv) Cash and cash equivalents (Cash in hand, cash at bank, etc.) <br> (v) Short-term loans and advances given <br> (vi) Other current assets (Prepaid expenses, accrued income, etc) | Current liabilities include <br> (i) Short-term borrowings <br> (ii) Trade payables (Bills payable and sundry creditors) <br> (iii) Other current liabilities (Expenses payable, income received in advance, etc.) <br> (iv) Short-term provisions |

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

Current ratio $=\frac{\text { Current assets }}{\text { Current liabilities }}=\frac{8,00,000}{4,00,000}=2: 1$
Current assets = Current investments + Inventories + Trade receivables

+ Cash and cash equivalents + Prepaid expenses

$$
=80,000+1,60,000+4,00,000+1,20,000+40,000=₹ 8,00,000
$$

Current liabilities $=$ Trade creditors + Bills payable + Expenses payable

$$
=1,60,000+1,00,000+1,40,000=₹ 4,00,000
$$

(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:

$$
\text { Quick ratio }=\frac{\text { Quick assets }}{\text { Current liabilities }}
$$

Quick assets = Current assets - Inventories - 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

$$
\text { Quick ratio }=\frac{\text { Quick assets }}{\text { Current liabilities }}=\frac{1,85,000}{1,00,000}=1.85: 1
$$

Quick assets = Current assets - Inventories - Prepaid expenses

$$
\begin{aligned}
& =2,50,000-50,000-15,000 \\
& =₹ 1,85,000
\end{aligned}
$$

## Illustration 3

Following is the balance sheet of Magesh Ltd. as on 31st March, 2019:

| Particulars | $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| $\quad$ Equity share capital | $2,00,000$ |
| 2. Non-current liabilities |  |
| $\quad$ Long term borrowings | 50,000 |
| 3. Current liabilities | 17,000 |
| (a) Short-term borrowings | 25,000 |
| (b) Trade payables |  |
| (c) Other current liabilities | 3,000 |
| $\quad$ Expenses payable | 5,000 |
| (d) Short-term provisions | $\mathbf{3 , 0 0 , 0 0 0}$ |
| Total |  |


| 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 |  |
| Total | 5,000 |
|  | $\mathbf{3 , 0 0 , 0 0 0}$ |

Calculate: (i) Current ratio (ii) Quick ratio

## Solution

(i) Current ratio $=\frac{\text { Current assets }}{\text { Current liabilities }}=\frac{1,50,000}{50,000}=3: 1$

Current assets = Inventories + Trade receivables + Cash and cash equivalents

+ Prepaid expenses
$=45,000+70,000+30,000+5,000=₹ 1,50,000$
Current liabilities $=$ Short term borrowings + Trade payables + Expenses payable
+ Short term provisions
$=17,000+25,000+3,000+5,000=₹ 50,000$
(ii) Quick ratio $=\frac{\text { Quick assets }}{\text { Current liabilities }}=\frac{1,00,000}{50,000}=2: 1$

Quick assets $\quad=$ Total current assets - Inventories - Prepaid expenses

$$
=1,50,000-45,000-5,000=₹ 1,00,000
$$

## 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, | Shareholders' funds |
| bonds, long term loans and other long | = Equity share capital |
| term borrowings. | + Preference share capital + Reserves and surplus |



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.


## Illustration 4

From the following information, calculate debt equity ratio:
Balance sheet (Extract) as on 31.03.2018

| Particulars | $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital |  |
| Equity share capital | $1,00,000$ |
| (b) Reserves and surplus | 60,000 |
| 2. Non-current liabilities |  |
| Long-term borrowings (Debentures) | 80,000 |
| 3. Current liabilities |  |
| (a) Trade payables <br> (b) Other current liabilities <br> $\quad$ Outstanding expenses <br> Total | 50,000 |

## Solution

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 | $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital |  |
| (i) Equity share capital | $1,00,000$ |
| (ii) Preference share capital | 75,000 |
| (b) Reserves and surplus | 25,000 |
| 2. Non-current liabilities |  |
| $\quad$ Long-term borrowings |  |
| 3. Current liabilities |  |
| Trade payables | $2,00,000$ |
| Total | $\mathbf{4 , 0 0 , 0 0 0}$ |
| II ASSETS |  |
| 1. Non-current assets | $2,75,000$ |
| (a) Fixed assets | 50,000 |
| (b) Non-current investments |  |
| 2. Current assets | 75,000 |
| Cash and Cash equivalents |  |
| Total | $\mathbf{4 , 0 0 , 0 0 0}$ |

## Solution

$$
\text { Proprietary ratio }=\frac{\text { Shareholders' funds }}{\text { Total assets }}=\frac{2,00,000}{4,00,000}=0.5: 1
$$

Shareholders' funds = Equity share capital + Preference share capital + Reserves and surplus

$$
\begin{aligned}
& =1,00,000+75,000+25,000 \\
& =₹ 2,00,000
\end{aligned}
$$

(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:
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 |
| Debentures | = Equity share capital + Reserves and surplus |
| Bonds <br> 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 | $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital | $2,00,000$ |
| Equity share capital | $1,00,000$ |
| 6\% Preference share capital |  |
| (b) Reserves and surplus | $1,25,000$ |
| $\quad$ General reserve | 75,000 |
| $\quad$ Surplus |  |
| 2. Non-current liabilities | $2,00,000$ |
| Long-term borrowings (8\% Debentures) |  |
| 3. Current liabilities | $1,50,000$ |
| Trade payables | 50,000 |
| Provision for tax | $\mathbf{9 , 0 0 , 0 0 0}$ |

Capital gearing ratio $=\frac{\text { Funds bearing fixed interest and fixed dividend }}{\text { Equity shareholders' funds }}$

$$
=\frac{3,00,000}{4,00,000}=0.75: 1
$$

Funds bearing fixed interest and dividend $=6 \%$ Preference share capital $+8 \%$ Debentures

$$
=1,00,000+2,00,000=₹ 3,00,000
$$

$\begin{aligned} \text { Equity shareholder's funds } \quad & =\text { Equity share capital }+ \text { General reserve }+ \\ & \quad \text { Surplus } \\ = & 2,00,000+1,25,000+75,000=₹ 4,00,000\end{aligned}$

## 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 | $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital | $1,50,000$ |
| Equity share capital | $2,00,000$ |
| 8\% Preference share capital | $1,50,000$ |
| (b) Reserves and surplus |  |
| 2. Non current liabilities | $4,00,000$ |
| Long term borrowings (9\% Debentures) | 25,000 |
| 3. Current liabilities | 75,000 |
| Short-term borrowings from banks | $\mathbf{1 0 , 0 0 , 0 0 0}$ |
| Trade payables |  |
| Total | $7,50,000$ |
| II ASSETS |  |
| 1. Non-current assets | $1,20,000$ |
| Fixed assets | $1,00,000$ |
| 2. Current assets | 27,500 |
| (a) Inventories |  |
| (b) Trade receivables | 2,500 |
| (c) Cash and cash equivalents | $\mathbf{1 0 , 0 0 , 0 0 0}$ |

## Solution

(i) Debt equity ratio $=\frac{\text { Long term debt }}{\text { Shareholders' funds }}=\frac{4,00,000}{5,00,000}=0.8: 1$

Long term debt $=9 \%$ Debentures $=₹ 4,00,000$
Shareholders' funds = Equity share capital + Preference share capital + Reserves and surplus

$$
=1,50,000+2,00,000+1,50,000=₹ 5,00,000
$$

(ii) Proprietary ratio $=\frac{\text { Shareholders' funds }}{\text { Total assets }}=\frac{5,00,000}{10,00,000}=0.5: 1$
(iii) Capital gearing ratio $=\frac{\text { Funds bearing fixed interest and dividend }}{\text { Equity Shareholders' funds }}=\frac{6,00,000}{3,00,000}=2: 1$

Funds bearing fixed interest or dividend $=8 \%$ Preference share capital $+9 \%$ Debentures

$$
\begin{aligned}
& =2,00,000+4,00,000=₹ 6,00,000 \\
& =\text { Equity share capital }+ \text { Reserves a } \\
& =1,50,000+1,50,000=₹ 3,00,000
\end{aligned}
$$

$$
\text { Equity shareholders' funds } \quad=\text { Equity share capital }+ \text { Reserves and surplus }
$$

### 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) I nventory 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:

$$
\begin{aligned}
\text { Inventory turnover ratio }= & \frac{\text { Cost of revenue from operations }}{\text { Average inventory }} \\
\text { Cost of revenue from operations }= & \text { Purchases of stock in trade }+ \text { Changes in inventories of } \\
& \text { finished goods }+ \text { Direct expenses } \\
& \text { (or) } \\
& =\text { Revenue from operations }- \text { Gross profit }
\end{aligned}
$$

## Tutorial note

Revenue from operations is the net sales.

Changes in inventory
Direct expenses
= Opening inventory - Closing inventory

$$
=\text { Wages }+ \text { Carriage inwards }+ \text { Freight inwards }
$$

+ Dock charges + Octroi + Import duty + Coal, gas, fuel
and power + Other direct expenses

$$
\text { Average inventory }=\frac{\text { Opening inventory }+ \text { Closing inventory }}{2}
$$

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.
||||||| 304 ||||||

## Tutorial note

In the absence of opening inventory, closing inventory can be taken instead of average inventory.

## I nventory 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:

$$
\begin{gathered}
\text { Inventory conversion period } \\
\text { (in days) }
\end{gathered}=\frac{\text { Number of days in a year }}{\text { Inventory turnover ratio }}
$$

$\begin{gathered}\text { Inventory conversion period } \\ \text { (in months) }\end{gathered}=\frac{\text { Number of months in a year }}{\text { Inventory turnover ratio }}$

## 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

Inventory turnover ratio $=\frac{\text { Cost of revenue from operations }}{\text { Average inventory }}=\frac{1,20,000}{30,000}=4$ times
Cost of revenue from operations

$$
\begin{aligned}
= & \text { Opening inventory }+ \text { Net Purchases }+ \text { Direct expenses } \\
& (\text { carriage inwards })-\text { Closing inventory } \\
= & 40,000+90,000+10,000-20,000 \\
= & ₹ 1,20,000
\end{aligned}
$$

Average inventory $=\frac{\text { Opening inventory }+ \text { Closing inventory }}{2}$

$$
=\frac{40,000+20,000}{2}=₹ 30,000
$$

Inventory conversion period $=\frac{\text { Number of months in a year }}{\text { Inventory turnover ratio }}=\frac{12}{4}=3$ months (in months) (in 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:

Trade receivables turnover ratio $=\frac{\text { Credit revenue from operations }}{\text { Average trade receivables }}$
Average trade receivables $=\frac{\text { Opening trade receivables }+ \text { Closing trade receivables }}{2}$
Trade receivables = Trade debtors + 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:
$\underset{\text { (in days) }}{\text { Debt collection period }}=\frac{\text { Number of days in a year }}{\text { Trade receivables turnover ratio }}$
$\begin{aligned} \text { Debt collection period } \\ \text { (in months) }\end{aligned}=\frac{\text { Number of months in a year }}{\text { Trade receivables turnover ratio }}$

## 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

Trade receivables turnover ratio $=\frac{\text { Credit revenue from operations }}{\text { Average trade receivables }}=\frac{9,60,000}{1,60,000}=6$ times.
Trade receivables $=$ Debtors + 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.

Debt collection period $=\frac{\text { Number of months in a year }}{\text { Trade receivables turnover ratio }}=\frac{12}{6}=2$ months
(iii) Trade payables turnover ratio

Trade payables turnover ratio is the comparison of net credit purchases with average trade paybles during an accounting period. It gives the velocity of payment of cash towards trade payables. It is calculated as follows:

$$
\text { Trade payables turnover ratio }=\frac{\text { Net credit purchases }}{\text { Average trade payables }}
$$

Net credit purchases $=$ Total credit purchases - Purchases returns
Average trade payables $=\frac{\text { Opening trade payables }+ \text { Closing trade payables }}{2}$
Trade payables $=$ Trade creditors + 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:

$$
\begin{aligned}
& \text { Credit payment period }=\frac{\text { Number of days in a year }}{\text { Trade payables turnover ratio }} \\
& \begin{array}{c}
\text { Credit payment period } \\
\text { (in months) }
\end{array}
\end{aligned}
$$

## 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

Trade payables turnover ratio $=\frac{\text { Net credit purchases }}{\text { Average trade payables }}=\frac{1,00,000}{20,000}=5$ times

$$
\begin{aligned}
\text { Average trade payables } & =\frac{\text { Opening trade payables + Closing trade payables }}{2} \\
& =\frac{(20,000+4,000)+(10,000+6,000)}{2}=\frac{40,000}{2}=₹ 20,000
\end{aligned}
$$

$$
\begin{aligned}
& \text { payment period }=\frac{\text { Number of days in a year }}{\text { Trade payables turnover ratio }}=\frac{365}{5}=73 \text { days. } \\
& \text { (in days) }
\end{aligned}
$$

## (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.

$$
\begin{aligned}
\text { Fixed assets turnover ratio } & =\frac{\text { Revenue from operations }}{\text { Average fixed assets }} \\
\text { Average fixed assets } & =\frac{\text { Opening fixed assets }+ \text { Closing fixed assets }}{2}
\end{aligned}
$$

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.


## 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

Fixed assets turnover ratio $=\frac{\text { Revenue from operations }}{\text { Average fixed assets }}=\frac{60,00,000}{6,00,000}=10$ 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 <br> 31st March, 2018 <br> ₹ | As on <br> 31st March, 2019 <br> ₹ |
| :--- | ---: | ---: |
| 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) Inventory turnover ratio $=\frac{\text { Cost of revenue from operations }}{\text { Average inventory }}=\frac{6,00,000}{1,20,000}=5$ times

Average inventory $=\frac{\text { Opening inventory }+ \text { Closing inventory }}{2}$

$$
=\frac{1,40,000+1,00,000}{2}=\frac{2,40,000}{2}=₹ 1,20,000
$$

(ii) Trade receivables turnover ratio $=\frac{\text { Credit revenue from operations }}{\text { Average trade receivables }}$

$$
=\frac{10,50,000}{70,000}=15 \text { times }
$$

Average trade receivables $=\frac{\text { Opening trade receivables }+ \text { Closing trade receivables }}{2}$

$$
=\frac{80,000+60,000}{2}=\frac{1,40,000}{2}=₹ 70,000
$$

(iii) Trade payables turnover ratio $=\frac{\text { Net credit purchases }}{\text { Average trade payables }}=\frac{4,50,000}{45,000}=10$ times

Average trade payables $=\frac{\text { Opening trade payables }+ \text { Closing trade payables }}{2}$

$$
=\frac{40,000+50,000}{2}=\frac{90,000}{2}=₹ 45,000
$$

(iv) Fixed assets turnover ratio $=\frac{\text { Revenue from operations }}{\text { Average fixed assets }}=\frac{10,50,000}{5,25,000}=2$ times

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:

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

Gross profit ratio $=\frac{\text { Gross profit }}{\text { Revenue from operations }} \times 100$

$$
=\frac{20,000}{1,00,000}=x \quad 100=20 \%
$$

Gross profit $\quad=$ Revenue from operations - Cost of revenue from operations

$$
=1,00,000-80,000=₹ 20,000
$$

## (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.

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 <br> $₹$ |
| :--- | ---: | ---: |
| I. Revenue from operations |  | $8,00,000$ |
| II. Other Income |  | 20,000 |
| III. Total revenue (I +II) |  | $\mathbf{8 , 2 0 , 0 0 0}$ |
| IV. Expenses: |  | $4,50,000$ |
| Purchases of stock-in-trade | 1 | $-40,000$ |
| Changes in inventories | 2 | 22,000 |
| Employee benefits expenses |  | 68,000 |
| Other expenses |  | $5,00,000$ |
| Total expenses |  | $\mathbf{3 , 2 0 , 0 0 0}$ |

## Notes to Accounts

| Particulars | Amount <br> $₹$ |
| :--- | ---: |
| 1. Employee benefits expenses |  |
| Wages (direct) | 10,000 |
| Salaries | 12,000 |
| Total | 22,000 |
| 2. Other expenses |  |
| Administrative expenses | 20,000 |
| Selling and distribution expenses | 28,000 |
| Loss on sale of fixed asset | 20,000 |
| Total | 68,000 |

## Solution

Operating cost ratio $=\frac{\text { Operating cost }}{\text { Revenue from operations }} \times 100=\frac{4,80,000}{8,00,000}=\times 100=60 \%$
Cost of revenue from operations $=$ Purchases of stock-in-trade + Change in inventories of stock in trade + Direct expenses (wages)

$$
=4,50,000+(40,000)+10,000=₹ 4,20,000
$$

Operating expenses $=$ Administrative expenses + Selling and distribution expenses + Employee benefits expenses (salaries)

$$
=20,000+28,000+12,000=₹ 60,000
$$

Operating cost $=$ Cost of revenue from operations + Operating expenses

$$
=4,20,000+60,000=₹ 4,80,000
$$

## 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:

Operating profit ratio $=\frac{\text { Operating profit }}{\text { Revenue from operations }} \times 100$
Alternatively, it is calculated as under.
Operating profit ratio $=100-$ Operating cost ratio
Operating profit $=$ Revenue from operations - 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

Case 1: Operating profit ratio $=\frac{\text { Operating profit }}{\text { Revenue from operations }} \times 100$

$$
=\frac{1,50,000}{10,00,000} \times 100=15 \%
$$

Case 2: Operating profit ratio $=\frac{\text { Operating profit }}{\text { Revenue from operations }} \times 100$

$$
=\frac{3,00,000}{15,00,000} \times 100=20 \%
$$

Operating profit $=$ Revenue from operations - Operating Cost

$$
=15,00,000-12,00,000=₹ 3,00,000
$$

Case 3: Operating profit ratio $=\frac{\text { Operating profit }}{\text { Revenue from operations }} \times 100$

$$
=\frac{2,00,000}{20,00,000} \times 100=10 \%
$$

Gross profit
$=20,00,000 \times \frac{30}{100}=₹ 6,00,000$
Operating profit $\quad=$ Gross profit - Operating expenses
Operating profit $\quad=6,00,000-4,00,000=₹ 2,00,000$

## (iv) Net profit ratio

Net profit ratio is the percentage of net profit on revenue from operations. It is calculated as under:
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

Net profit ratio $=\frac{\text { Net profit after tax }}{\text { Revenue from operations }} \times 100=\frac{1,40,000}{3,50,000} \times 100=40 \%$
Net profit $=$ Revenue from operations - Cost of revenue from operations - Administration expenses - Selling expenses

$$
=3,50,000-1,50,000-50,000-10,000=₹ 1,40,000
$$

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 | Fmount <br> $₹$ |
| :--- | ---: |
| I. Revenue from operations | $5,00,000$ |
| II. Other income: |  |
| $\quad$ Income from investment | 40,000 |
| III. Total revenues (I+II) | $\mathbf{5 , 4 0 , 0 0 0}$ |
| 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 | $3,90,000$ |
| V. Profit for the year | $\mathbf{1 , 5 0 , 0 0 0}$ |

## Solution

(i) Gross profit ratio $=\frac{\text { Gross profit }}{\text { Revenue from operations }} \times 100=\frac{3,00,000}{5,00,000} \times 100=60 \%$

$$
\begin{aligned}
\text { Gross profit } & =\text { Revenue from operations }- \text { Cost of revenue from operations } \\
& =5,00,000-2,00,000=₹ 3,00,000
\end{aligned}
$$

Cost of revenue from operations $=$ Purchase of stock in trade + Changes in inventories

$$
=1,80,000+20,000=₹ 2,00,000
$$

(ii) 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: |  |
| $\quad$ Income from investments | 200 |
| III. Total revenues (I+II) | $\mathbf{2 0 , 2 0 0}$ |
| IV. Expenses: |  |
| $\quad$ Purchases of stock-in-trade | 17,000 |
| $\quad$ Changes in inventories | $-1,000$ |
| $\quad$ Finance costs | 300 |
| $\quad$ Other expenses (administration and selling) | 2,400 |
| $\quad \quad$ Total expenses | 18,700 |
| V. Profit before tax (III - IV) | $\mathbf{1 , 5 0 0}$ |

## Solution

(i) Gross profit ratio $=\frac{\text { Gross profit }}{\text { Revenue from operations }} \times 100=\frac{4,000}{20,000} \times 100=20 \%$

Cost of revenue from operations $=$ Purchase of stock-in-trade + Changes in inventory + Direct expenses $=17,000-1,000+0=₹ 16,000$
Gross profit $\quad=$ Revenue from operations - Cost of revenue from operations $=20,000-16,000=₹ 4,000$
(ii) 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) Operating cost ratio $=\frac{\text { Operating cost }}{\text { Revenue from operations }} \times 100=\frac{18,400}{20,000} \times 100=92 \%$

Operating cost $\quad=$ Cost of revenue from operations + Operating expenses
Operating expenses $=$ Other expenses $=₹ 2,400$
Operating cost $\quad=16,000+2,400=₹ 18,400$
(iv) Operating profit ratio $=\frac{\text { Operating profit }}{\text { Revenue from operations }} \times 100=\frac{1,600}{20,000} \times 100=8 \%$

Operating profit $\quad=$ Revenue from operations - Operating cost
$=20,000-18,400=₹ 1,600$

## (v) Return on I nvestment (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:

$$
\text { Return on Investment }(\text { ROI })=\frac{\text { Net profit before interest and tax }}{\text { Capital employed }} \times 100
$$

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 <br> $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital | 70,000 |
| (b) Reserves and surplus | 25,000 |
| 2. Non-current liabilities |  |
| Long-term borrowings | 30,000 |
| 3. Current liabilities |  |
| (a) Trade payables | 20,000 |
| (b) Other current liabilities | 15,000 |
| (c) Short-term provisions | 42,000 |
| Total | $\mathbf{2 , 0 2 , 0 0 0}$ |

Net profit before interest and tax for the year was ₹ 25,000 . Calculate the return on capital employed for the year.

## Solution

Return on Investment $=\frac{\text { Net profit before interest and tax }}{\text { Capital employed }} \times 100$

$$
=\frac{25,000}{1,25,000}=x \quad 100=20 \%
$$

Capital employed = Share capital + Reserves and surplus + Long term borrowings

$$
=70,000+25,000+30,000=₹ 1,25,000
$$

## 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
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
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

(i) Current ratio
(ii) Net profit ratio
(iii) Debt-equity ratio
(iv) Inventory turnover ratio

Codes:
(i)
(ii)
(iii)
(iv)
(a) $\begin{array}{lllll}1 & 4 & 3 & 2\end{array}$
$\begin{array}{lllll}\text { (b) } & 3 & 2 & 4 & 1\end{array}$
(c) $\begin{array}{lllll}4 & 3 & 2 & 1\end{array}$
(d) $\begin{array}{lllll}1 & 2 & 3 & 4\end{array}$
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) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 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 | $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds | $4,00,000$ |
| $\quad$ Equity share capital | $2,00,000$ |
| 2. Non-current liabilities |  |
| $\quad$ Long term borrowings |  |
| 3. Current liabilities | 50,000 |
| (a) Short-term borrowings | $3,10,000$ |
| (b) Trade payables | 15,000 |
| (c) Other current liabilities | 25,000 |
| $\quad$ Expenses payable | $\mathbf{1 0 , 0 0 , 0 0 0}$ |
| (d) Short-term provisions |  |
| Total | $4,00,000$ |
| II ASSETS |  |
| 1. Non-current assets |  |
| (a) Fixed assets | Tangible assets |


| 2. Current assets |  |
| :--- | ---: |
| (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 |
| Total | $\mathbf{1 0 , 0 0 , 0 0 0}$ |

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 <br> $₹$ |
| :--- | ---: |
| I. EQUITY AND LIABILITIES <br> 1. Shareholders' funds <br> (a) Share capital <br> Equity share capital <br> (b) Reserves and surplus <br> 2. Non-current liabilities <br> $\quad$ Long-term borrowings (Debentures) <br> 3. Current liabilities <br> (a) Trade payables <br> (b) Other current liabilities <br> $\quad$ Outstanding expenses <br> Total |  |

(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 <br> $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital | $2,50,000$ |
| (i) Equity share capital | $1,50,000$ |
| (ii) Preference share capital | 50,000 |
| (b) Reserves and surplus |  |
| 2. Non-current liabilities |  |
| $\quad$ Long-term borrowings |  |
| 3. Current liabilities |  |
| Trade payables |  |
| $\quad$ Total | $\mathbf{6 , 0 0 , 0 0 0}$ |

## II ASSETS

1. Non-current assets
(a) Fixed assets
(b) Non-current investments
2. Current assets

Cash and Cash equivalents
Total

|  |
| ---: |
| $4,60,000$ |
| $1,00,000$ |
|  |
| 40,000 |
| $\mathbf{6 , 0 0 , 0 0 0}$ |

(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 <br> $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital |  |
| $\quad$ Equity share capital | $4,00,000$ |
| 5\% Preference share capital | $1,00,000$ |
| (b) Reserves and surplus |  |
| $\quad$General reserve <br> $\quad$ Surplus | $2,50,000$ |
| 2. Non-current liabilities |  |
| Long-term borrowings (6\% Debentures) | $1,50,000$ |
| 3. Current liabilities |  |
| $\quad$Trade payables <br> Provision for tax <br> Total | $3,00,000$ |

(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 <br> $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital | $2,50,000$ |
| Equity share capital | $2,00,000$ |
| 6\% Preference share capital | $1,50,000$ |
| (b) Reserves and surplus |  |
| 2. Non-current liabilities | $3,00,000$ |
| Long-term borrowings (8\% Debentures) | $2,00,000$ |
| 3. Current liabilities | $1,00,000$ |
| Short-term borrowings from banks | $\mathbf{1 2 , 0 0 , 0 0 0}$ |
| Trade payables |  |
| $\quad$ Total |  |


| II ASSETS |  |
| :--- | ---: |
| 1. Non-current assets |  |
| $\quad$ Fixed assets | $8,00,000$ |
| 2. Current assets |  |
| (a) Inventories | $1,20,000$ |
| (b) Trade receivables | $2,65,000$ |
| (c) Cash and cash equivalents | 10,000 |
| (d) Other current assets |  |
| $\quad$ Expenses paid in advance | 5,000 |
| $\quad$ Total | $\mathbf{1 2 , 0 0 , 0 0 0}$ |

(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: $\mathbf{2 . 4} \mathbf{~ m o n t h s )}$
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 <br> 31st March, 2018 <br> ₹ | As on <br> 31st March, 2019 <br> $₹$ |
| :--- | ---: | ---: |
| 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 <br> $₹$ |
| :--- | ---: | ---: |
| I. Revenue from operations |  | $15,00,000$ |
| II. Other Income |  | 40,000 |
| III. Total revenue (I +II) |  | $\mathbf{1 5 , 4 0 , 0 0 0}$ |
| IV. Expenses: |  |  |
| Purchases of Stock-in-trade |  | $8,60,000$ |
| Changes in inventories | 40,000 |  |
| Employee benefits expense (Salaries) |  | $1,60,000$ |
| Other expenses |  | $1,70,000$ |
| Total expenses |  | $12,30,000$ |
|  |  | $\mathbf{3 , 1 0 , 0 0 0}$ |

## Notes to Accounts

| Particulars | Amount <br> $₹$ |
| :--- | ---: |
| 1. Other expenses |  |
| Office and administrative expenses | 50,000 |
| Selling and distribution expenses | 90,000 |
| Loss on sale of furniture | 30,000 |

(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 |
| III. Total revenues (I+II) | 24,70,000 |
| 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 |
| V. Profit for the year | 2,40,000 |

(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 |
| III. Total revenues (I+II) | $4,04,000$ |
| IV Expenses: | $2,10,000$ |
| Purchases of stock-in-trade | 30,000 |
| Changes in inventories | 24,000 |
| Finance costs | 60,000 |
| Other expenses (Administration and selling) | $3,24,000$ |
| $\quad$ Total expenses | 80,000 |

(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 | $₹$ |
| :--- | ---: |
| I EQUITY AND LIABILITIES |  |
| 1. Shareholders' funds |  |
| (a) Share capital | $2,00,000$ |
| (b) Reserves and surplus | 50,000 |
| 2. Non-current liabilities |  |
| Long-term borrowings | $1,50,000$ |
| 3. Current liabilities |  |
| (a) Trade payables | $1,30,000$ |
| (b) Other current liabilities | 5,000 |
| (c) Short-term provisions | 20,000 |
| Total | $\mathbf{5 , 5 5 , 0 0 0}$ |

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\%)


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?

## Reference

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## UNIT 10

COMPUTERISED ACCOUNTING SYSTEMTALLY

| 10.1 | Contents |
| :--- | :--- |
| 10.2. | Applications of Computerised |
|  | Acounting System (CAS) |
| 10.3 | Automated accounting system |
| 10.4 | Designing the accounting reports |
| 10.5 | Data exchange with other <br> information system |
| 10.6. | Application of computerised <br> accounting system - Tally with |
|  | GST package |
| 10.7. | Practical application of accounting |
| software - Tally.ERP 9 |  |


To enable the students to

- Understand the automated
accounting system

$\leqslant$| Apply Tally.ERP 9 in maintaining |
| :--- |
| books of accounts and generating |
| reports |


| Key terms to know |  |  |
| :---: | :---: | :---: |
| $\stackrel{\text { Gateway of Tally }}{ }$ |  |  |
| $\stackrel{*}{ }$ Accounting groups |  |  |
| $\stackrel{*}{ }$ Accounting features |  |  |
| $\stackrel{\text { Receipt voucher }}{ }$ |  |  |
| $\stackrel{\rightharpoonup}{*}$ Payment voucher |  |  |
| $\bigcirc$ Contra voucher |  |  |
| $\stackrel{\rightharpoonup}{ }$ | Purchase voucher |  |
| $\stackrel{\rightharpoonup}{*}$ | Sales voucher |  |
|  | Journal voucher |  |

### 10.1 I ntroduction

## 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 Acounting 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.
〈|||||| 331 |||||||

## 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 maintainenance 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 |
| :--- | :--- |
| 1 | Bank Accounts |
| 2 | Bank OCC A/c |
| 3 | Bank OD A/c |
| 4 | Branch / Divisions |
| 5 | Capital Account |
| 6 | Cash-in-Hand |
| 7 | Current Assets |
| 8 | Current Liabilities |
| 9 | Deposits (Assets) |
| 10 | Direct Expenses |
| 11 | Direct Incomes |
| 12 | Duties \& Taxes |
| 13 | Expenses (Direct) |
| 14 | Expenses (Indirect) |
| 15 | Fixed Assets |
| 16 | Income (Direct) |
| 17 | Income (Indirect) |


|  | List of Groups |
| :--- | :--- |
| 18 | Indirect Expenses |
| 19 | Indirect Incomes |
| 20 | Investments |
| 21 | Loans \& Advances (Asset) |
| 22 | Loans (Liability) |
| 23 | Misc.Expenses (ASSET) |
| 24 | Provisions |
| 25 | Purchase Accounts |
| 26 | Reserves \& Surplus |
| 27 | Retained Earnings |
| 28 | Sales Accounts |
| 29 | Secured Loans |
| 30 | Stock-in-Hand |
| 31 | Sundry Creditors |
| 32 | Sundry Debtors |
| 33 | Suspense A/c |
| 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,

$$
\text { Gateway of Tally }>\text { Masters }>\text { Accounts Info }>\text { Groups }>\text { Single Group }>\text { Display }
$$

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:

| $\begin{gathered} \hline \text { Sl. } \\ \text { No. } \end{gathered}$ | 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. <br> To Cash A/c | 30,000 | 30,000 | Contra <br> Voucher | Bank Accounts Cash-in-Hand |
| 3 | Furniture $A / c$ Dr. <br> To Cash $A / c$  | 10,000 | 10,000 | Payment Voucher | Fixed Assets <br> Cash-in-Hand |
| 4 | Purchases A/c <br> To Mohaideen A/c | 20,000 | 20,000 | Purchase Voucher | Purchase Accounts Sundry Creditors |
| 5 | Cash A/c Dr.  <br> To Sales A/c  | 8,000 | 8,000 | Sales Voucher | Cash-in-Hand <br> Sales Accounts |
| 6 | Purchases A/c Dr.  <br> To Cash A/c  | 5,000 | 5,000 | Purchase <br> Voucher | Purchase Accounts <br> Cash-in-Hand |
| 7 | Rony A/c <br> To Sales A/c | 60,000 | 60,000 | Sales Voucher | Sundry Debtors Sales Accounts |
| 8 | Cash A/c <br> To Bank A/c | 9,000 | 9,000 | Contra <br> Voucher | Cash-in-Hand <br> Bank Accounts |
| 9 | Mohaideen A/c Dr.  <br> To Bank A/c  | 10,000 | 10,000 | Payment Voucher | Sundry Creditors <br> Bank Accounts |
| 10 | Cash A/c <br> Dr. <br> To Rony A/c | 5,000 | 5,000 | Receipt <br> Voucher | Cash-in-Hand <br> Sundry Debtors |
| 11 | Salaries A/c Dr.  <br> To Bank A/c  | 6,000 | 6,000 | Payment <br> Voucher | Indirect Expenses <br> Bank Accounts |
| 12 | Wages A/c <br> To Cash A/c | 3,000 | 3,000 | Payment Voucher | Direct Expenses Cash-in-Hand |
| 13 | Stationery A/c <br> To Pandian Ltd. A/c | 4,000 | 4,000 | Journal <br> 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


Figure 10.13 Creation of State Bank of India A/c
(iii) To create Furniture $\mathrm{A} / \mathrm{c}$

Name: Furniture A/c
Under: Fixed Assets
Accept: Yes
(iv) To create Purchases A/c

Name: Purchases A/c
Under: Purchase
Accept: Yes

## (v) To create Mohaideen A/c

Name: Mohaideen A/c
Under: Sundry Creditors Accept: Yes
(vi) To create Sales A/c

Name: Sales A/c
Under: Sales Accounts
Accept: Yes


Figure 10.14 Creation of Furniture A/c


Figure 10.16 Creation of Mohaideen A/c


〈|||||| 341 ||||||>
(vii) To create Rony A/c

Name: Rony A/c
Under: Sundry Debtors
Accept: Yes
(viii) To create Salaries A/c

Name: Salaries A/c
Under: Indirect Expenses
Accept: Yes
(ix) To create Wages A/c

Name: Wages A/c
Under: Direct Expenses
Accept: Yes
(x) To create Stationery A/c

Name: Stationery A/c
Under: Indirect Expenses
Accept: Yes


Figure 10.20 Creation of Wages A/c


Figure 10.21 Creation of Stationery A/c
〈|||||| 342 ||||||
(xi) To create Pandian Ltd. A/c Name: Pandian Ltd. A/c
Under:Sundry Creditors Accept: Yes


## 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 ₹ $\mathbf{1 0 , 0 0 0}$

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

(5) Cash sales made for ₹ $\mathbf{8 , 0 0 0}$

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 ₹ $\mathbf{6 0 , 0 0 0}$

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

(8) Money withdrawn from bank for office use ₹ $\mathbf{9 , 0 0 0}$

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 ₹ $\mathbf{1 0 , 0 0 0}$ 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 ₹ $\mathbf{5 , 0 0 0}$ 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 ₹ $\mathbf{6 , 0 0 0}$

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 ₹ $\mathbf{4 , 0 0 0}$

F7: Journal voucher
Particulars: Stationery
Amount: ₹ 4,000
To Pandian Ltd.
Amount: ₹ 4,000
Narration: Stationery bought on credit from Pandian Ltd.
Accept Yes
5. To view reports


Figure 10.35 Creation of Journal voucher
(i) To view Trial Balance

Gateway of Tally $>$ Reports $>$ Display $>$ Trial Balance $>$ AltF1 (detailed)


Figure 10.36 Trial Balance
〈|||||| 347 ||||||
(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)


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)


Figure 10.38 Balance Sheet
〈|||||| 348 |||||||

## (iv) To view Ratio Analysis

F10: A/c Reports > Ratio Analysis
(or)
Gateway of Tally $>$ Reports $>$ Ratio Analysis


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)


Figure 10.40 Day Book
〈III|| 349 III||>

## 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 |
|  |  |  | $2,50,000$ |

During the year the following transactions took place:
(a) Wages paid by cash ₹ 2,000
(b) Rent paid by cheque ₹ 5,000
(c) Cash purchases made for ₹ 3,000
(d) Good purchased on credit from Senthamarai ₹ 15,000
(e) Goods sold on credit to Pushparaj ₹ 25,000
(f) Payment made to Senthamarai by cheque ₹ 5,000
(g) Cash received from Shankar ₹ 30,000
(h) Cash sales made for ₹ 6,000
(i) Depreciate machinery at $10 \%$
(j) 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 <br> Gateway of Tally > Masters > Accounts Info > Ledgers > Single Ledger > Create

| Creation of | Name | Under | Opening <br> 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



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:


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 ₹ $\mathbf{2 , 0 0 0}$ 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)


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)


Figure 10.46 Balance Sheet
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## 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

1. Accounting report prepared according to the requirements of the user is
(a) Routine accounting report
(b) Special purpose report
(c) Trial balance
(d) Balance sheet
2. Function key F11 is used for
(a) Company Features
(b) Accounting vouchers
(c) Company Configuration
(d) None of these
3. Which submenu displays groups, ledgers and voucher types in Tally?
(a) Inventory vouchers
(b) Accounting vouchers
(c) Company Info
(d) Account Info
4. What are the predefined Ledger(s) in Tally?
(i) Cash
(ii) Profit \& Loss A/c
(iii) Capital $\mathrm{A} / \mathrm{c}$
(a) Only (i)
(b) Only (ii)
(c) Both (i) and (ii)
(d) Both (ii) and (iii)
5. Contra voucher is used for
(a) Master entry
(b) Withdrawal of cash from bank for office use
(c) Reports
(d) Credit purchase of assets
6. Which is not the default group in Tally?
(a) Suspense account
(b) Outstanding expense
(c) Sales account
(d) 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.
(a) Devi commenced a business with a capital of ₹ $4,00,000$
(b) An account was opened with Indian Bank and deposited ₹ 60,000
(c) Purchased furniture by paying cash ₹ 15,000
(d) Goods purchased on credit from Sumathy for ₹ 50,000
(e) Cash sales made for ₹ 10,000
(f) Goods purchased from Raja for ₹ 5,000 and paid by cheque
(g) Goods sold to Arun on credit for ₹ 70,000
(h) Money withdrawn from bank for office use ₹ 25,000
(i) Part payment of ₹ 30,000 made to Sumathy by cheque
(j) Arun made part payment of ₹ 10,000 by cash
(k) Salaries paid to staff through ECS ₹ 36,000
(l) Carriage on purchases of ₹ 6,000 paid by cash
(m) Purchased computer from Muthu Ltd. on credit ₹ 44,000
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
(b) Salaries paid by cheque ₹ 10,000
(c) Cash purchases made for ₹ 4,000
(f) Payment made to Yazhini through NEFT ₹ 6,000
(d) Good purchased on credit from
(g) Cash received from Peter ₹ 10,000
Yazhini ₹ 30,000
(h) Cash sales made for ₹ 4,000
(e) Goods sold on credit to Jothi ₹ 40,000
(i) Depreciate buildings at $20 \%$
(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.


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

## $\stackrel{\rightharpoonup}{A-z}$ <br> GLOSSARY

| Accounting features | கணக்கியல் அம்சங்கள் |
| :---: | :---: |
| Accounting groups | கணக்கியல் தொகுப்புகள் |
| Accounting information system | கணக்கியல் தகவல் அமைப்பு |
| Accounting ratios | கணக்कியல் விகிதங்கள் |
| Accounting reports | கணக்கியல் அறிக்கைகள் |
| Accounting software | கணக்கியல் மென்பொருள் |
| Accumulated loss | குவிந்த நட்டம் |
| Accumulated profit | குவிந்த இலாபம் |
| Additional capital | தnடுதல் முதல் |
| Administrative expenses | நிர்வாகச் செலவகள் |
| Admission of partner | தூட்டாளி சேர்ப்பு |
| Allotment money | ヤதுக்கீட்டுப் பணம் |
| Annuity table | ஆண்டுத்தொகை அட்டவணை |
| Application money | விண்ணப்பப் பணம் |
| Authorised capital | அங்கீकரிக்கப்பட்ட முதல் |
| Automated accounting system | தானியங்கி கணக்கியல் அமைப்பு |
| Average profit | சராசரி இலாபம் |
| Average stock | சராசரி சரக்கிருப்பு |
| Bills payable account | செலுத்தற்குரிய மார்று\|்சீட்டு கணஷ்கு |
| Bills receivable account | பெறு\|தற்குரிய 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 | வொது அளவ இருப்பு நிலைக் குரிப்பு |
| Common size income statement | பொது அளவு வருமான அறிக்கை |
| Company | நிறுமம் |
| Company features | நிறும அம்சங்கள் |
| Comparative balance sheet | ヤப்பீட்டு இருப்புநிலைக் குறிப்பு |
| Comparative income statement | ஒப்பீட்டு வருமான அறிக்கை |
| Comparative statement | ஒப்பீட்டு அறிக்கை |
| Computerised accounting system | கணினிமய கணக்கியல் முறை |
| Continuing partner | தொடரும் ¢nட்டாளி |
| Contra voucher | எதிர்பதிவு சான்றாவணம் |
| Cost of revenue from operations | விற்பனை மூலம் கிடைத்த வருவாய்க்கான அடக்கவிலை |
| Creditors account | கடனீநததேர் கணக்கு |
| Creditors turnover ratio | கடனீந்தோர் 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 | தnட்டாளியின் இறப்பு |
| Debentures | கடனீடடுுப் பத்திரங்கள் |
| Debt collection period | கடன் வசூலிப்புக் காலம் |
| Debt equity ratio | புற அक பொறுப்பு விகிதம் |
| Debt payment period | கடன் செலுத்தும் காலம் |
| Debtors account | கடனாளிகள் கண்்கு |
| 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 | முक மதிப்பு |
| Fictitious asset | கற்பனைச் சொத்து |
| Final call money | இறுதி அழைப்ப 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 | நிலைடுதல் |
| Fluctuating capital | மாறுபடும் முதல் |
| Forfeiture of shares | பங்கு ஒறுப்பிழப்பு |
| Gaining ratio | ஆதாய விகிதம் |
| Gateway of Tally | Tally தொடக்க திரை |
| General reserve | पொது காப்பு |
| Goodwill | நற்பெயர் |
| Gross profit ratio | மொத்த இலாப விகிதம் |
| Income and expenditure account | வருவாய் செலவினக் கணக்கு |
| Income received in advance | முன்ஞூட்டிப் பெற்ற வருமானம் |
| Incoming partner | உள்வரும் ஞnட்டாளி |
| Incomplete records | முழுமை பெறாத பதிவேடுகள் |
| Intangible asset | புலனாகாச் சொத்து |
| Interest on capital | முதல் மீது வட்4ி |
| Interest on drawings | எடுப்புகள் மீதான வட்டி |
| Inventories | சரக்கிருப்பு |
| Inventory turnover ratio | சரக்கிருப்பு விற்பனை விகிதம் |


| Issued capital | வெளியிடப்பட்ட முதல் |
| :---: | :---: |
| Joint stock company | あnட்டுப் பங்கு நிறுமம் |
| Journal voucher | குறிப்பேட்டு சான்றாவணம் |
| Legacy | உயில்கொடை |
| Liquidity | நீர்மைத் தன்மை |
| Long term solvency | நீண்டகால செயல்திறன் |
| Memorandum revaluation account | நினைவு குறிப்பு மறுமதிப்பீடு கணக்கு |
| Minimum subscription | குறுமப் பங்கொப்ப்் |
| Net profit ratio | நிகர இலாப விகிதம் |
| Net tangible assets | நிகர புலனாகும் சொத்துகள் |
| Net worth method | நிகர மதிப்பு முறை |
| New partner | புதிய कn⿺廴亡ாாளி |
| New profit ratio | புதிய இலாப விகிதம் |
| Non operating expenses | இயக்கம் சாரா செலவுகள் |
| Non operating income | இயக்கம் சாரா வரவுகள் |
| Non recurring expenses | திரும்ப திரும்ப நிகழுச் செலவுள் |
| Non recurring incomes | कிரும்ப कிரும்ப நிகழா வருமானங்கள் |
| Non－current investments | நீண்டகால முதலீடுகள் |
| Normal profit | சாதாரண இலாபம் |
| Not－for profit organization | இலாப நோக்கமற்ற அமைப்புகள் |
| Number of years of purchase | கொள்டுதல் ஆண்டுகளின் எண்ணிக்கை |
| Old partner | பழைய कூ L்டாளி |
| Old ratio | பழைய விகிதம் |
| Opening capital | தொடக்க முதல் |
| Operating cost ratio | இயக்க விகிதம் |
| Operating expenses | இயக்க்் செலவுகள் |
| Operating profit | இயக்க இலாபம் |
| Outgoing partner | வெளிச்செல்லும் कூட்டாளி |
| Over subscription | மிகை ஒப்பம் |
| Paid up capital | செலுத்தப்பட்ட முதல் |
| Partner | कूL்டாளி |
| Partner＇s loan account | कூட்டாளியின் கடன் கணக்கு |
| Partnership | சூட்டாண்மை |
| Payments | செலுத்தல்கள் |
| Payments voucher | செலுத்தல்கள் சான்றாவணம் |
| Perpetual succession | நிலைபேற்றுத் தொடர்ச்சி |
| Preference shares | முன்னுரிமைப் பங்குகள் |
| Previous year | முந்றைய ஆண்டு |
| Private company | தனி நிறுமம் |
| 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 |


| Proprietory ratio | உரிமையாளர் விகிதம் |
| :---: | :---: |
| Prospectus | தகவலறிக்கை |
| Public company | பொது நிறுமம் |
| Public issue | பொது வெளியீடு |
| Purchase voucher | கொள்முதல் சான்றாவணம் |
| Quick ratio | விரைவு விकிதம் |
| 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 | ઠூL்டாளி விலகல் |
| Return on investment | முதலீடுகள் மீதான வருவாய் |
| Revaluation account | மறுமமிப்பீட்டு கணக்கு |
| Revaluation loss | மறுமதிப்பீட்டு நட்டம் |
| Revaluation profit | மறுமதிப்பீட்டு இலாபம் |
| Revenue from operations | விற்பனை セூலம் கிடைத்த வருவாய் |
| Right issue | உரிமை வெளியீடு |
| Sacrificing ratio | தியாக விகிதம் |
| Sales voucher | விற்பனை சான்றாவணம் |
| Securities premium | பத்திர ハுனைமம் |
| Selling and distribution expenses | விற்பனை மற்றும் பகிர்வுச் செலவுகள் |
| Share capital | பங்கு டுதல் |
| Shareholders funds | பங்குதாரர் நிதி |
| Shares | பங்குகள் |
| Short term borrowings | குறுகிய காலக் கடன்கள் |
| Short term solvency | குறுகிய கால செயல்திறன் |
| Single entry system | ஒற்றைப் பதிவ 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 சொத்துகள் |
| Trade payables | கணக்கின் மூலம் செலுத்த வேண்டியவைகள் |
| Trade receivables | கணக்கின் セூலம் பெறவேண்டியவைகள் |
| Under subscription | குறை ஒப்பம் |
| Undistributed profits and reserves | பகிர்ந்துதரா இலாபங்கள் மற்றும் காப்பகள் |
| Unlimited liability | வரையறா பொறுப்பு |
| Voucher | சான்றாவணம் |
| Weighted average profit | சூட்டுடு சராசரி இலாபம் |
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[^0]:    * Goodwill of the firm is ₹ 30,000

    Deri's share of goodwill $=30,000 \times 2 / 10=₹ 6,000$
    It is to be distributed to Veena and Pearl in their sacrificing ratio of 5:1

