FUNDAMENTALS OF FINANCIAL ACCOUNTING IN MACHINE WORLD AN INTRODUCTION TO COMPUTERIZED ACCOUNTING

Prof. (Dr.) Dinesh Sharma • Dr. Manish Sharma

Himalaya Publishing House
ISO 9001:2015 CERTIFIED

FUNDAMENTALS OF
FINANCIAL ACCOUNTING IN MACHINE WORLD
AN INTRODUCTION TO COMPUTERIZED ACCOUNTING

Professor (Dr.) DINESH SHARMA

Professor, Department of Commerce,
University of Lucknow.

Dr. MANISH SHARMA

Department of Business Administration,
Institute of Engineering & Technology, Lucknow,
Senior Lecturer, Syscoms College, LuLu International Group, UAE.

Himalaya Publishing House

ISO 9001:2015 CERTIFIED

FIRST EDITION : 2019

Published by : Mrs. Meena Pandey for **Himalaya Publishing House Pvt. Ltd.,**
"Ramdoot", Dr. Bhalerao Marg, Girgaon, Mumbai - 400 004.
Phones: 022-23860170, 23863863; **Fax:** 022-23877178
E-mail: himpub@bharatmail.co.in **Website:** www.himpub.com

Branch Offices :

New Delhi : "Pooja Apartments", 4-B, Murari Lal Street, Ansari Road, Darya Ganj, New Delhi - 110 002. Phones: 011-23270392, 23278631; Fax: 011-23256286

Nagpur : Kundanlal Chandak Industrial Estate, Ghat Road, Nagpur - 440 018. Phones: 0712-2738731, 3296733; Telefax: 0712-2721216

Bengaluru : Plot No. 91-33, 2nd Main Road, Seshadripuram, Behind Nataraja Theatre, Bengaluru - 560 020. Phone: 080-41138821; Mobile: 09379847017, 09379847005

Hyderabad : No. 3-4-184, Lingampally, Besides Raghavendra Swamy Matham, Kachiguda, Hyderabad - 500 027. Phone: 040-27560041, 27550139

Chennai : New No. 48/2, Old No. 28/2, Ground Floor, Sarangapani Street, T. Nagar, Chennai - 600 012. Mobile: 09380460419

Pune : "Laksha" Apartment, First Floor, No. 527, Mehunpura, Shaniwarpeth (Near Prabhat Theatre), Pune - 411 030. Phones: 020-24496323, 24496333; Mobile: 09370579333

Lucknow : House No. 731, Shekhupura Colony, Near B.D. Convent School, Aliganj, Lucknow - 226 022. Phone: 0522-4012353; Mobile: 09307501549

Ahmedabad : 114, "SHAIL", 1st Floor, Opp. Madhu Sudan House, C.G. Road, Navrang Pura, Ahmedabad - 380 009. Phone: 079-26560126; Mobile: 09377088847

Ernakulam : 39/176 (New No. 60/251), 1st Floor, Karikkamuri Road, Ernakulam, Kochi - 682 011. Phones: 0484-2378012, 2378016; Mobile: 09387122121

Cuttack : New LIC Colony, Behind Kamala Mandap, Badambadi, Cuttack - 753 012, Odisha. Mobile: 09338746007

Kolkata : 108/4, Beliaghata Main Road, Near ID Hospital, Opp. SBI Bank, Kolkata - 700 010. Phone: 033-32449649; Mobile: 07439040301

DTP by : Sudhakar Shetty

Printed at : M/s. Charita Impressions, Hyderabad on behalf of HPH.

Dedicated To

Benevolent Guidance of Respected Professor H. K. Paliwal
(Director, Institute of Engineering & Technology, Lucknow,
Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, India)

❄ ❄ ❄

Many Thanks to

My Source of Inspiration & Motivation Shri Ravi Chandra (Retd.),
(Principal, Kendriya Vidyalaya Sangathan)

❄ ❄ ❄

Helping Hand

Ms. Arzoo Gupta, Scholar, Institute of Engineering & Technology, Lucknow
(Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, India)

PREFACE

It gives us immense pleasure in presenting the First Edition of **"Fundamentals of Financial Accounting in Machine World: An Introduction to Computerized Accounting"** in the hands of students. The purpose of this comprehensive content is to meet in full measure the requirements of students studying accountancy with inclination toward harnessing enhanced computerized capabilities. This content aims to develop and use quantitative and different methods to solve problems in financial accounting and to better prepare students with market ready skills with the help of computer applications. At the end of this course, you are expected to be proficient in applying accounting and financial decision-making approaches in a computerized environment.

This course enables the students to have hands-on experience with accounting practices and techniques through Information Technology and help in developing planning skill and monitoring skill in accounting and financial function in an IT environment.

At the outset, we as authors would like to express our deep love to our beloved ***Late Shri Kedarnath Sharma 'Padhaji'*** and ***Late Smt. Shanti Sharma*** (Respected parents of Prof. (Dr.) Dinesh Sharma), and ***Late Mrs. Rajni Sharma*** and ***Shri Suraj Kumar Sharma*** (Respected parents of Dr. Manish Sharma) for their blessings as their continuous support that strengthen us in our work.

We publicly extend our appreciation to the renowned authorities on the subject whose publications have been used by us. We also extend our gratitude towards our publishers for their very tender and nice care to the book while in Press. Any suggestions for the improvement of the book shall be highly appreciated and gratefully acknowledged.

Cheerful and thoughtful reading ahead.

AUTHORS

COURSE DESCRIPTION

The purpose of this course is to develop and use quantitative and different methods to solve problems in financial accounting and to better prepare students with the help of computer applications. You will study and learn various financial models in financial decision-making through lectures and other practical sessions. At the end of this course, you are expected to be proficient in applying accounting and financial decision-making approaches in a computerized environment.

COURSE OBJECTIVES

This course enables the students to:

1. To give illustration on accounting practices and techniques through Information Technology.
2. To develop planning skill and monitoring skill in accounting and financial function in an IT environment.

LEARNING OUTCOMES

On successful completion of this course, students should be able to:

Course Learning Outcomes

1. To give an illustration on accounting practices and techniques through information technology.
2. To develop planning skill and monitoring skill in accounting and financial function in an IT environment.

SYLLABUS

Covers AICTE Model Curriculum for MBA Programme in Financial Accounting for Managers (Sub Code KMB 103) and Working Capital Management (Sub Code RMB FM 04) and intended for students of MBA I and MBA II year of A. P. J. Abdul Kalam Technical University, Lucknow.

UNIT – I

Introduction to Accounting: Accounting Basics and Terminology – Branches of Accounting – Mode of Accounting – Fundamentals of Manual Accounting and Computerized Accounting, Introduction to Computerized Accounting (Usage of Accounting Software).

Accounting Concepts: Business Income and Adjusting Entries, Analysing Transactions: The Accounting Equation, Classified Financial Statements, Financial Statements and the Closing Process.

Accounting Operations: Accounting for Merchandising Operations and Transactions.

Voucher Systems, Accounting for Receivables and Payables, Accounting Systems and Special Purpose Journals.

Short-term Liquid Assets and Inventories, Internal Controls.

UNIT – II

Inventory Management – Stock Groups – Stock Items – Stock Category – Units of Measures, Godown Inventory Vouchers – Pure Inventory and Inventory Vouchers, Integration of Accounting with Inventory – Bill-wise Details – Invoicing – Voucher Entry – Cost Centre – Cost Category – Budget and Control.

UNIT – III

Bank Reconciliation – Interest Calculation, Order Processing – Stock Valuation Methods – Reorder Levels – Tracking Numbers – Bill of Material – Inventory Ageing Analysis. Tax Application in Tally – Interstate Transfer, Service Tax – Accounting and Inventory Reports – Trading, Profit and Loss Account – Balance Sheet – Ledgers – Cost Centre and Budget Reports, Cash Book and Bank Book – Inventory Reports.

UNIT – IV

Decision Supporting Tools – Ratio Analysis – Cash Flow, Fund Flow, Budgeting System, Printings of Vouchers – Vouchers and Bills Printing, etc. ODBC Interface – Export and Import of Data – Web Enabled Reporting – Online Support of Software.

UNIT – V

Concepts of Working Capital and its Types, Determinants of Working Capital, Methods of Calculating Working Capital, Working Capital Financing. Cash Flow Statement: Various Cash and Non-cash Transactions, Flow of Cash, Difference between Cash Flow and Fund Flow, Preparation of Cash Flow Statement and its Analysis.

CONTENTS

INTRODUCTION TO FINANCIAL ACCOUNTING: LANGUAGE OF BUSINESS

1

Introduction to Accounting – Accounting Basics and Terminology – Branches of Accounting – Mode of Accounting – Fundamentals of Manual Accounting & Computerized Accounting, Introduction to Computerized Accounting (Usage of Accounting Software).

Accounting Concepts: Business income and adjusting entries, Analysing transactions: The accounting equation, Classified Financial Statements, Financial Statements and the Closing Process.

Accounting Operations: Accounting for Merchandising Operations and Transactions.

Voucher Systems, Accounting for Receivables and Payables, Accounting Systems and Special Purpose Journals.

Short-term Liquid Assets and Inventories, Internal Controls.

MEANING AND DEFINITION OF ACCOUNTING

Accounting has rightly been termed as the language of the business. It records, classifies, analyses and communicates all the business transactions that have taken place during a particular period. It is a system of recording and reporting business transactions in financial terms to interested parties and stakeholders.

American Accounting Association defines accounting as "the process of identifying, measuring and communicating economic information to permit informed judgments and decision by users of the information."

Features or Characteristics or Nature of Accounting

Following are the features of accounting:–

1. Accounting is an art.
2. Accounting is a science.
3. It records business transactions.

4. It classifies business transactions into separate heads known as 'Accounts'.
5. Summarising the classified data is the next step.
6. Analysis and interpretation of the summarised data is the prominent aspect of accounting.
7. Communicating information to the interested parties is the core objective of accounting.
8. It records transaction and events which are of financial character and monetarily expressed.

Advantages of Accounting

1. Ascertainment of profit and loss of business.
2. Ascertainment of financial position of business.
3. Ascertainment of amounts due to/due from other businesses.
4. Ascertainment of progress of the business in terms of yearly growth.
5. Maintenance permanent records of business for legal purposes.

Disadvantages of Accounting

1. Does not provide complete information for decision making.
2. Do not give exact information for future financial planning.
3. Accounting figures may be manipulated termed as 'Window Dressing'.
4. Does not show the real financial position of the business and figures are not inflation adjusted.
5. Accounting fails to supply the financial information for quick decisions and is historical in nature

Functions of Accounting

(i) Record Keeping Function: The primary function of accounting relates to recording, classification and summary of financial transactions — journalizing, posting, and preparation of final statements. These facilitate to know operating results and financial positions. The purpose of this function is to report regularly to the interested parties by means of financial statements. Thus accounting performs historical function, *i.e.,* attention on the past performance of a business; and this facilitates decision making programme for future activities.

(ii) Managerial Function: Decision making programme is greatly assisted by accounting. The managerial function and decision making programmes, without accounting, may mislead. The day-to-day operations are compared with some predetermined standard. The variations of actual operations with pre-determined standards and their analysis is possible only with the help of accounting.

(iii) Legal Requirement function: Auditing is compulsory in case of registered firms. Auditing is not possible without accounting. Thus accounting becomes compulsory to comply with legal requirements. Accounting is a base and with its help various returns, documents, statements etc., are prepared.

(iv) Language of Business: Accounting is the language of business. Various transactions are communicated through accounting. There are many parties — owners, creditors, government, employees etc., who are interested in knowing the results of the firm and this can be communicated only through accounting. Accounting shows a real and true position of the firm or the business.

BRANCHES OF ACCOUNTING

Increased scale of business operations has made the management function more complex. This has given rise to specialised branches in accounting. The main branches of accounting are

- Financial Accounting
- Cost Accounting
- Management Accounting

Financial Accounting: Financial accounting focuses on the maintenance of records either on the cash basis or on the mercantilist system commonly known as accrual system of making financial records. Financial records are prepared in compliance to government regulations and also to cater specific needs of the management, decision makers external to the organisation, such as stockholders, suppliers, banks, and government agencies. They conduct financial analysis to decide on their future course of action with regard to their association with the business entity concerned for which records are being prepared.

Objectives of Financial Accounting

- **Systematic Recording of Transaction:** Basic objective of accounting is to systematically record the financial aspects of business transaction, *i.e.,* book-keeping. These recorded transactions are later on classified and summarised logically for the preparation of financial statements and for their analysis and interpretation.
- **Ascertainment of Result of Above Recorded Transactions:** Accountant prepares profit and loss account to know the result of business operations for a particular period of time. If expenses exceed revenue then it is said that business is running under loss. The profit and loss account helps the management and different stakeholders associated with business in taking rational decisions. For example, if business is not proved to be remunerative or profitable, the cause of such a state of affair can be investigated by the management for taking remedial steps.
- **Ascertainment of the Financial Position of Business:** A businessman is not only interested in knowing the result of the business in terms of profits or loss for a particular period but is also anxious to know that what he owes (liability) to the outsiders and what he owns (assets) on a certain date. To know this, the accountant prepares a financial position statement of assets and liabilities of the business at a particular point of time known as Balance Sheet that helps in ascertaining the financial health of the business.
- **Providing Information to the Users for Rational Decision-Making:** Accounting as a 'language of business' communicates the financial result of an enterprise to various stakeholders by means of financial statements. Accounting aims to meet the financial information needs of the decision-makers and helps them in rational decision-making.

- **To Know the Solvency Position of the Firm:** By preparing the Balance Sheet, management not only reveals what is owned and owed by the enterprise, but it also gives the information regarding the firm's ability to meet its liabilities in the short run (liquidity position) and also in the long-run (solvency position) as and when they fall due.

Scope of Financial Accounting

Following activities are included within the framework of financial accounting:–

1. Book-keeping
2. Preparation of Financial Statements – Trading Account, Profit & Loss Accounts, Balance Sheet
3. Analysis and interpretation of financial statements for easy comprehendability of users of records
4. Financial reporting and Filing of Compliance Reports with Regulators and Authorities.
5. Adherence to Accounting principles.
6. Strictly following the Accounting Standards for preparation of records.

Limitations of Accounting

Accounting suffers from the following limitations:

1. It is historical in nature and hence has limited applicability in financial decision making.
2. Transactions of non-monetary nature will not be recorded in accounting, *e.g.,* honesty, punctuality.
3. Information recorded in accounts is influenced by the personal judgment of the accountant.
4. In accounting valueless assets are also shown unless and until disposed off.
5. In accounting price changes are not considered. Hence pure financial accounting is not inflation adjusted. For this purpose a separate specialised set of Inflation Accounting is used.
6. It is not an exact science. Though financial accounting works on principles, concepts like any other science, it is very much different from pure science like physics, chemistry. It is so because it does not give perfect solutions. The results are never same in case of financial accounting even under same or similar conditions.
7. Use of different accounting methods, concepts and techniques reduces the reliability of accounts.
8. Accounting records show only historical costs figures. Actual values of assets and liability in the records may be more or less.

Cost Accounting: It is the process of accounting and controlling the cost of a product, operation or function. The purpose of this branch of accounting is to know the cost for controlling or reducing the cost and to communicate information to the management for decision making.

Management Accounting: Management accounting is the presentation of accounting information is such a way as to assist management in the creation of policy and the day-to-day operation of an undertaking. Management Accounting has no definite format or proforma unlike financial and cost accounting and is not done in regular manner.

Basic Accounting Terms

The understanding of the subject becomes easy when one has the knowledge of important basic terms of the subject. Some of basic terminologies used in financial accounting are explained below:

- **Transactions:** Transactions are those activities of a business, which involve transfer of money or goods or services between two persons or two accounts. For example, purchase of goods, sale of goods, borrowing from bank, lending of money, salaries paid, rent paid, commission received and dividend received each involves at least two accounts. Transactions are mainly of two types, namely, cash and credit transactions.
- **Assets:** Any physical thing or right owned that has a money value are an asset. In other words, an asset is that expenditure which results in acquiring of some property or benefits of a lasting nature.
- **Liability:** The amount which business owes to other parties. Liabilities may be:
  - **Current liabilities:** Liabilities that are paid off within one year of business operations, *e.g.,* Unpaid Salary
  - **Non-current liabilities:** Liabilities that remained due for over one year in business before they are finally paid off, *e.g.,* Long Term Loans.
- **Capital:** It means the amount (in terms of money or assets having money value) which the proprietor has invested in the firm or can claim from the firm. It is also known as owner's equity or net worth. Owner's equity means owner's claim against the assets. It will always be equal to assets less liabilities, say:

$$\boxed{\textbf{Capital = Assets – Liabilities}}$$

- **Revenue:** It is defined as the inflow of assets which result in an increase in the owner's equity.
- **Expense:** The terms 'expense' refers to the amount incurred in the process of earning revenue, *e.g.,* Rent paid, Salary paid, Repairs.
- **Debtor:** A person who owes money to the firm mostly on account of credit sales of goods is called a Debtor. For example, when goods are sold to a person on credit that person pays the price in future, he is called a debtor because he owes the amount to the firm.
- **Creditor:** A person to whom money owes by the firm is called Creditor. For example Ahmad is a creditor of the firm when goods are purchased from him on credit. He will remain creditor of the firm until Ahmad is finally paid off in full settlement of his account.
- **Goods:** It is a general term used for the articles in which the business deals; that is, only those articles which are bought for resale for profit are known as Goods.
- **Purchases:** Buying of goods by the trader for selling them to his customers is known as Purchases. As the trade includes buying and selling of commodities, Purchase is considered as the main function of a trade.

- **Sales:** When the goods purchased are sold out, it is known as Sales. Sales can be made in cash or on credit.
- **Stock:** Stock means goods purchased for selling but remained in store and are not sold out fully. A part of the total goods purchased is kept with the trader until it is sold out, it is stock. Stocks are mainly of three type: raw materials, work-in-progress and finished goods.
- **Drawings:** It is the amount of money or the value of goods which the proprietor takes for his domestic or personal use. It is usually subtracted from Capital that he/she has invested at the commencement of business.
- **Losses:** Loss really means some expenses incurred by the firm against which the firm receives no benefit. It represents money given up without any return, *e.g.,* Bad Debt, Loss by Fire.
- **Bad Debts:** An amount which is irrecoverable from Debtor is termed as bad debts. Amount which will remain uncollected on account of goods sold or services rendered to a customer for a fairly long period.

USERS OF ACCOUNTING INFORMATION

The basic objective of accounting is to provide information which is useful for persons and groups inside and outside the organisation.

I. **Internal Users:** Internal users are those individuals or groups who are within the organisation like owners, management, employees and trade unions.

II. **External Users:** External users are those individuals or groups who are outside the organisation like creditors, investors, banks and other lending institutions, present and potential investors, Government, tax authorities, regulatory agencies and researchers.

Need for information

Internal users (Primary Users) of accounting information include the following:

- **Management:** Management uses accounting information for analysing the organisation's performance and position and taking appropriate measures to improve the company results.
- **Employees:** Employees of an organisation use accounting records for assessing company's profitability and its consequence on their future remuneration and job security.
- **Owners/Promoters:** Uses accounting information for analysing the viability and profitability of their investment and determining any future course of action for their investments.

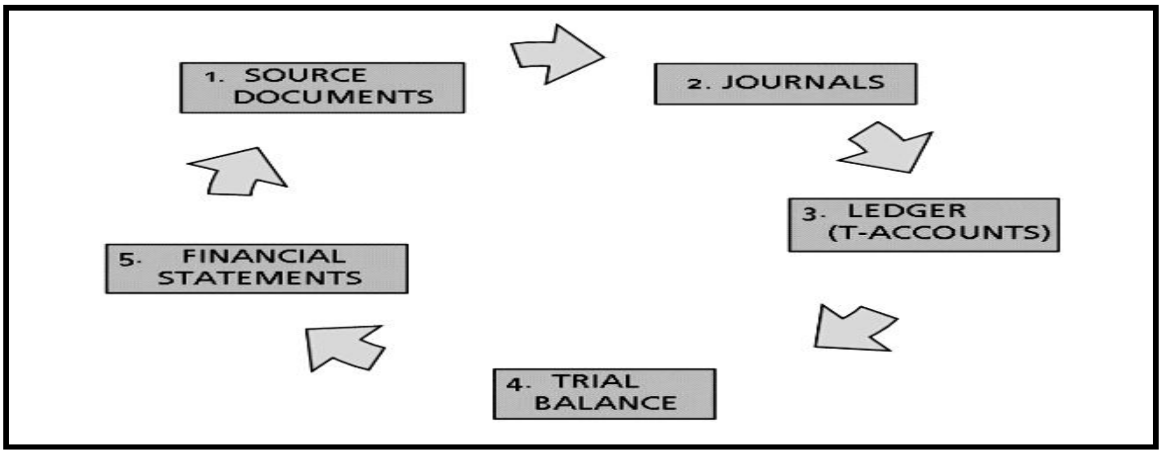
External users (Secondary Users) of accounting information include the following:

- **Creditors:** Creditors uses accounting information for determining the creditworthiness of the organisation. Terms of credit are set by creditors according to the assessment of their customers' financial health. Creditors include suppliers as well as lenders of finance such as banks.
- **Tax Authorities:** Income tax department and income tax officials uses accounting information for determining the credibility of the tax returns filed on behalf of the company by the management.

- **Investors:** Investor or prospective investors uses accounting information for analysing the feasibility of making any new or further investment in the company. Investors want to make sure they can earn a reasonable return on their investment before they commit any financial resources to the company.
- **Customers:** As a firm can also be a customer for any other firm, customers of any organisation require accounting information for assessing the financial position of its suppliers which is necessary for them to maintain a stable source of supply in the long term.
- **Regulatory Authorities:** Market regulators and government regulatory authority requires accounting information for ensuring that the company's disclosure of accounting information is in accordance with the rules and regulations set in order to protect the interests of the stakeholders who rely on such information for informed decisions making.

Meaning of Accounting Cycle

Accounting cycle begins with the series of steps when a transaction occurs and end with its inclusion in the financial statements. The steps are follows:



ACCOUNTING CYCLE

Double Entry System

There are numerous transactions happening in a business concern each day. Each transaction, when closely analysed, reveals two aspects. One aspect will be "receiving aspect" or "incoming aspect" or "expenses/loss aspect". This is termed as the "Debit aspect". The other aspect will be "giving aspect" or "outgoing aspect" or "income/gain aspect". This is termed as the "Credit aspect". These two aspects namely "Debit aspect" and "Credit aspect" forms the basis of Double Entry System. The double entry system is so named since it records both the aspects of any transaction.

According to J. R. Batliboi, Every business transaction has a two-fold effect. Each transaction affects at least two accounts in opposite directions. If a complete record were to be made of each such transaction, it would be necessary to debit one account and credit another account. It is this recording of the two-fold aspect of every transaction that has given rise to the term 'Double Entry System'.

Features

- Every business transaction affects at least two accounts.
- Each transaction has two aspects, *i.e.,* one debit aspect and other credit aspect.
- Double entry is based upon accounting concepts, principles and assumptions.
- Double Entry System results in preparing trial balance which is a test of arithmetical accuracy in accounting.
- Preparation of final accounts is possible only with the help of trial balance hence double entry system results in preparation of financial statements like – Trading Account, Profit & Loss Accounts and Balance Sheet.

Advantages of Double Entry System

- Double Entry System is scientific in nature.
- It records transactions completely.
- It keeps check on the accuracy of accounts.
- Helps in ascertainment of profit or loss of business.
- It helps in obtaining knowledge about the financial position of the business.
- Double Entry system gives full details for purposes of control of business and it helps to check frauds, omissions and errors.
- Comparative study is possible with the help of double entry system.
- It helps management in decision making and thus is helpful in future financial planning.

ACCOUNT

Every business transaction has two aspects and each aspect is given a classification and name in term of an 'Account'. It can be stated in simple words that 'an account is related to a person, thing or a business event and is a summary of relevant transactions at one place relating to that particular head for a particular period.

Classification of Accounts

- Personal Account
- Real Account
- Nominal Account

1. Personal Accounts: It may include the account of person, company or any artificial juridical person with whom the business deals. These accounts are further classified in to three categories

- **Natural Personal Accounts:** The term natural persons mean persons who are creation of god and are living individuals, *e.g.,* Ali's accounts, Shobhit's accounts etc.
- **Artificial Personal Accounts:** These accounts includes accounts of corporate bodies or institutions, *e.g.,* A. P. J. AKTU University, AICTE etc.
- **Representative Personal Account:** These accounts represents or indicate towards certain person or group of persons indirectly. For example Salary Outstanding, Rent Outstanding