

# **Cost Accounting**

**Fourth Edition** 

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# **Cost Accounting**

### **Fourth Edition**

### Prof. Jawahar Lal

Ex-Head, Department of Commerce
Ex-Dean, Faculty of Commerce and Business
Department of Commerce
Delhi School of Economics
University of Delhi

### Dr. Seema Srivastava

Lecturer, Department of Commerce Moti Lal Nehru College University of Delhi



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# PREFACE TO THE FOURTH EDITION

It is our pleasure to place the fourth edition of the book *Cost Accounting* among the students and other readers. The earlier edition of the book has been highly appreciated by the students and the academic community. This fact has further inspired us to make the revised edition a highly valuable and student friendly text.

The fourth edition of *Cost Accounting* is further an attempt to present an update on different aspects of cost accounting in a more logical, clear and comprehensive manner. Large portions in most chapters of the book have been thoroughly revised and rearranged to make them more lucid and understandable to the students and other users. The following chapters have been greatly modified and improved to make them highly purposeful for the students.

- Financial Accounting, Cost Accounting and Management Accounting
- Cost: Concepts and Classifications
- Activity—Based Costing
- Marginal (Variable) Costing
- Alternative Choices Decisions
- Pricing Decisions
- Responsibility Accounting and Divisional Performance Measurement

In addition to the above, this edition has added new inputs on certain emerging concepts in cost accounting. It has the following value-added features to make it an essential and quality text for the students.

- (i) All the chapters in the book begin with Learning Objectives to enhance understanding of concepts and discussion presented in the chapters.
- (ii) Inclusion of materials on some emerging concepts and other topics to strengthen the discussion of the subject matter such as
  - Backflush Costing
  - Throughput Costing
  - Cost Management
  - Kanban
  - Advantages and Demerits of ABC
  - ABC in Service Organisations
  - Target Costing
  - Kaizen Costing
  - Life Cycle Costing
  - · Activity-based Management
  - Curvi-linear Breakeven Analysis
  - Desired or Target Profit

- Multi-product situations
- Sales Mix and Breakeven point
- Desired Profit and Tax
- Cost Indifference Point
- Relevant Revenues
- Qualitative Factors
- Make/Buy or Outsourcing Decision
- Target Pricing
- Prices Indifference Point
- Objectives in Sound Transfer Pricing System
- (iii) Numerical Problems taken from the examination papers of the following courses have been included in the text.
  - B.Com. (Hons.), University of Delhi
  - B.Com., University of Delhi
  - C.A., Professional Competence Course, Group II, Paper IV Cost Accounting and Financial Management (earlier known as C.A. (Inter) and P.E. Course II, Group II)
  - I.C.W.A. (Intermediate) Stage I, Paper V Cost and Management Accounting [earlier known as C.A. (Inter)]
- (iv) Objective Type Questions taken from the examination papers of B.Com. (Hons.), B.Com. of University of Delhi, C.A., I.C.W.A. and other examinations have been given in Appendix A alongwith their answers. They include True/False statements, Fill in Blanks, Matching Statements and Multiple Choice Questions.
- (v) All the chapters have now more solved and unsolved numerical problems.
- (vi) Theory questions of the examination papers of B.Com. (Hons.), B.Com. of University of Delhi, C.A., I.C.W.A. have been included.
- (vii) Solutions manual as a companion volume has been developed for this edition which contains solutions to all the numerical problems given in different chapters of the text. This will be available on the website (address: www.mhhe.com/lalcostacc4e).

This fourth edition fits adequately and satisfactorily well with the course contents of the following courses:

- (i) B.Com. (Hons.) course of University of Delhi, Paper IX Cost Accounting and Paper XVI Management Accounting
- (ii) B.Com. Course of University of Delhi, Paper XII Cost Accounting
- (iii) B.Com. and M.Com. of other Indian Universities having a paper on Cost Accounting in their syllabi
- (iv) C.A., Professional Competence Course, Group II, Paper 4 Cost Accounting and Financial Management (for Cost Accounting portion)
- (v) I.C.W.A., Intermediate, Stage I, Paper 5 Cost and Management Accounting
- (vi) M.B.A., M.F.C., MIB, MHROD, C.S., C.F.A. and other professional examinations having a semester or annual course on Cost Accounting

It is our strong conviction that this fourth edition would prove highly relevant and very useful text to the students pursuing the above courses.

We would welcome and appreciate constructive suggestions and opinions from the readers to improve further the quality of the book.

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### ili ondinissii wa o kaliddayigaga REFACE TO THE FIRST EDITION

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This book has been written to serve as a text and provides a vigorous and interesting coverage of the topics in a simple manner. It is designed to help students understand the role of cost accounting, a subject of considerable interest and utility, in accomplishing three broad objectives: (i) cost ascertainment; (ii) cost analysis and cost control; and (iii) managerial decision-making. To achieve these objectives, the contents of the text have been divided into five parts. Part I explains the objectives and role of cost accounting, and basic cost concepts. Part II emphasises the basic elements of cost and Part III discusses cost accumulation and costing making. Part IV is devoted to a discussion on the foundations of managerial planning, control and decision-making. Part V discusses some independent topics which are important in cost accounting.

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Part I consists of two chapters which covers the basic concepts and techniques in depth, before a student is exposed to the more vital areas of cost accounting.

Chapter 1 deals with cost accounting, financial accounting, objectives of cost accounting and the cost accounting department.

Chapter 2 provides a survey of basic cost concepts, such as fixed cost, variable cost, semi-variable cost, direct cost, indirect cost, product cost, period cost, opportunity cost, sunk cost, differential cost, joint cost, common cost, and other cost concepts.

Part II is devoted to the basic elements of cost.

Chapters 3, 4, 5, 6 and 7 discuss in detail, each of the components making up the cost of goods manufactured—materials, labour, overhead costs, and expenses.

Part III explains the approaches to product cost accounting, i.e. the basic cost methods. It also stresses methods of accounting systems—integrated and non-integrated.

Chapters 8, 9, 10, 11 describe in great detail cost accumulation methods, such as single costing, job costing, process costing, and operating costing respectively.

Chapters 12, 13, 14 and 15 are devoted to cost control accounts, reconciliation of cost and financial accounts, integrated accounts, and uniform costing and inter-firm comparison.

Part IV consists of four chapters whose principal emphasis is on the internal uses of cost accounting data for managerial planning, control and decision-making.

Chapter 16, 17, 18 and 19 cover and make an in-depth study of budgeting, standard costing and variance analyses, variable costing, and decision-making problems.

Part V comprises four independent chapters which cover a few but important areas in cost accounting. Chapters 20, 21, 22 and 23 explain responsibility accounting and cost control, marketing cost analyses and decisions, mechanised accounting, cost audit and costing requirements.

I strongly believe that cost accounting books available at present in India and used by the students, both university and professional, have not responded adequately and satisfactorily to their changing requirements and objectives. Most such books lack relevant, up-to-date and adequate material, logical presentation, practical problems, and satisfactory explanation of basic cost accounting concepts, cost analysis, and managerial uses of cost accounting data.

The present book not only avoids the limitation of these presently available books, but also has several features to help students adequately in their academic and professional courses. Basically, it aims at achieving the following important objectives:

- Detailed coverage of all topics and related subject matter in cost accounting.
- Adequate flexibility to fulfil the needs of different university and professional courses in cost accounting which vary in terms of coverage and emphasis.
- Simple, clear and logical presentation, and an integrated approach to the study of cost accounting, making the subject appear as one comprehensive unit.
- A wide range of illustrations beginning with simple ones and subsequently presenting complex problems. This will help create confidence among students and encourage them to accept challenges later.
- A wide range of thought-provoking questions and problems varying in content, length and difficulty.
   Most problems are new and have been taken from university and professional examinations, such as B Com (Hons), B Com, M Com, CA, ICWA, ICMA and CIMA (UK), CMA and CPA (USA).
- Coordination between the questions and problems at the end of each chapter and the discussions and explanations presented in the body of the chapter. This facilitates the learning process among students and increases understanding of the subject.

The present book will be very useful for the following courses:

- B Com (Hons), B Com and M Com examinations
- The Institute of Chartered Accountants of India examinations (Intermediate)
- The Institute of Cost and Works Accountants of India examinations (Intermediate)
- Company Secretaries examination
- Master of Business Administration (MBA) examination
- The Institute of Chartered Financial Analysts of India
- Other professional examinations

I am grateful to numerous persons and friends who have given valuable suggestions in the course of writing this text. The materials found in an existing source and used in the book have been duly acknowledged. I appreciate the permissions given by various publishers to use the published materials in this text.

To my wife Pratibha, and our children Sanjay, Seema and Rajnish, I acknowledge a special debt. Their constant support, encouragement and patience have greatly eased my burden and made this project possible. I sincerely welcome criticisms, views and suggestions from readers for improvement of this text.

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SCFP	Statement of Changes in Financial	CVP	Cost-Volume-Profit
5011	Position	BEP	Break-even Point
GAAP	Generally Accepted Accounting	DMV	Direct Material Variances
G/MII	Principles	DMCV	Direct Material Cost Variance
ICMA	The Institute of Cost and Management	DMPV	Direct Material Price Variance
ICIVIZA	Accountants	DMUV	Direct Material Usage Variance
JIT	Just-In-Time	DLCV	Direct Labour Cost Variance
CIMA	Chartered Institute of Management	DLRV	Direct Labour Rate Variance
CIMA	Accountants	DLRTV	Direct Labour Rate Time Variance
WIP	Work-In-Process or Progress	DLITV	Direct Labour Idle Time Variance
ABC	Activity Based Costing	LCV	Labour Cost Variance
ABM	Activity Based Management	LEV	Labour Efficiency Variance
EOQ	Economic Order Quantity	LYV	Labour Yield Variance
ROQ	Reorder Quantity	LRV	Labour Rate Variance
ROL	Reorder Level	ITV	Idle Time Variance
TQM	Total Quality Management	LMV	Labour Mix Variance
AQL	Acceptable Quality Level	ZBB	Zero Base Budgeting
FIFO	First-in, First-out	PPBS	Planning, Programming and Budgeting
LIFO	Last-in, First-out		System
	Highest-in, First-out	ROI	Return On Investment
HIFO		RI	Residual Income
WN	Working Note		

# CONCEPTUAL FRAMEWORK

The first part of this book discusses the basic nature of financial accounting, cost accounting and management accounting and different cost concepts and classifications. The distinctive features and scope of financial, cost and management accounting alongwith their similarities, dissimilarities, and roles have been discussed in the first chapter. The second chapter focuses on different cost classifications for different purposes, cost control; cost reduction and preparation of cost sheet.

- 1. FINANCIAL ACCOUNTING, COST ACCOUNTING AND MANAGEMENT ACCOUNTING
- 2. COST: CONCEPTS AND CLASSIFICATIONS