Cost and Management Accounting I

As per new B Com CBCS syllabus 2017 for CU

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Preface

Cost accounting and management accounting are regarded as specialized branches of accounting. As the title suggests, this book is concerned with both cost accounting and management accounting but emphasis is placed on the former. In the current curricular set up of the University of Calcutta, the two sub-fields of accounting have been brought under a common umbrella. The dependence of both the sub-fields of accounting on common basic source data and their reliance on exchange of information pave the way for their unison.

Cost accounting involves accounting and control of cost. It is concerned with the measurement of cost and communication of cost-related information to the management for their effective decision making. Cost accounting is useful for locating unprofitable activities and inefficiencies occurring in various forms of wastes. It further facilitates the preparation of projected cost statement and assists in controlling actual cost of production. It is also useful for price fixation, submission of quotation, tender, etc. Thus, cost-related information becomes imperative for planning and controlling the operations of an enterprise. Intelligently used cost information forms the basis of many strategic decisions. Long-term competitive success of an enterprise depends on its proper cost management.

Management accounting deals with the presentation of accounting and other information to the management for managerial decision-making purposes. It provides financial data, cost data, and other qualitative information to the management for their planning, decision making, and control purposes. Management accounting acts as a decision support system for providing the right information to the management at the right time. It guides management's actions and helps managers to run their organizations smoothly. In recent years, the management accounting profession has gained immense importance due to increased competitiveness as a result of globalization and advancement in technology. Thus, management accounting is a subject worthy of serious study by the students and professionals of both management and accounting professions. Therefore, existing as well as desirous managers show their keen interest in management accounting.

Objective of the Book

The aim of this book is to acquaint the readers with a conceptual understanding on various principles of cost and management accounting in a logical and systematic manner. This book intends to provide practical knowledge on various methods and techniques of cost and management accounting. It helps students in learning the basics of cost and management accounting and gathering information they need to make important decisions. It also provides exhaustive treatment of various concepts and principles of cost and management accounting. This will enable students and professionals to understand and use accounting data in various managerial decisions.

This knowledge will help students in exploring many career opportunities available in the field of cost and management accounting. Students and professionals will get benefitted by using relevant cost data in making various business decisions. The materials available in this book will cater well to the requirements of the desired target group of students and the book will turn out to be a student friendly textbook.

Proposed Readers

This book is specially conceived for students preparing for B Com (Second Semester) Honours course of the University of Calcutta under CBCS curriculum. Besides, students of other universities in

West Bengal (such as Burdwan University, Kalyani University, Kazi Nazrul University, Barasat State University, North Bengal University, Vidyasagar University, etc.) and students of professional courses, such as CA, CMA, CS, BBA, MBA, etc., may also find this book useful to accomplish their objectives. Therefore, in general, students in the field of business studies are the proposed readers of this book.

Pedagogical Features

- This book is written in a simple style, offering clarity of presentation so that the readers can very easily grasp the subject matter.
- Proper emphasis has been laid on conceptual clarity, due explanation of formulae, detailed illustrations, and chapter-end assignment for work practice.
- It provides an exhaustive treatment of various methods and techniques on cost and management accounting in practical business situations.
- Theoretical portion is substantiated with a number of illustrations and diagrams for easy understanding.
- This book incorporates current thoughts, latest trends, and balancing theories with practical application.
- It contains a sufficiently large number of worked-out problems on each topic, properly graded and with full-length solutions. Alternative solutions have been given wherever necessary. Special care has been taken in explaining the points that students find difficult and tricky.
- Terms appearing in the latest terminology of CIMA, London, have been used and thoroughly explained with suitable examples.
- Each chapter ends with a set of theoretical and practical assignments so that the students can reinforce their understanding properly and prepare themselves well for examinations.
- Questions recently set at various professional and university examinations have been incorporated so as to expose students with the latest trends adopted by those institutions in conducting their examinations.
- This book aims at preparing students effectively by providing conceptual understanding in a logical and systematic manner.

Content and Structure

This book contains 10 chapters, which are as follows:

Chapter 1 provides an insight into the basics on cost and management accounting.

Chapter 2 deals with the concept of cost, classification of costs, and analysis of total cost.

Chapter 3 focuses on the concept of inventory, types of materials, and its accounting treatment.

Chapter 4 covers the classification, accounting, and control of labour cost.

Chapter 5 describes the concept, classification, and accounting treatment of direct expenses.

Chapter 6 discusses various forms of overheads, their absorption, and accounting treatment.
Chapter 7 offers various methods of costing (job costing, batch costing, and contract costing).

Chapter 8 examines cost accumulation procedure and profit measurement for process costing.

Chapter 9 deals with the method of costing applicable to service industry (i.e., operating costing).

Chapter 10 focuses on cost control accounting, reconciliation of cost and financial profits, etc.

Acknowledgements

I am indebted to my parents for their constant encouragement, support, and motivation that inspired me to write this textbook. I am grateful to my respected teachers from whom I learnt the basics of this subject. I have relied on authoritative treatises and published articles in the field of cost and management accounting in my country and abroad. The sources have been duly acknowledged at appropriate places. I convey my best wishes to my beloved student Prof. Soumya Mukherjee and my colleague Prof. Amlan Mazumder for their valuable support.

I express my gratitude to Oxford University Press for inspiring me to instil quality in this book. I owe a lot to the editorial team of Oxford University Press India for their nice care of the book while composing, proofreading, and printing.

I convey my affection to my daughter Miss Alankrita Mitra for her efficient secretarial assistance at the time of preparing the manuscript.

There might have been certain gaps in my work. I request the readers to send me their constructive suggestions, comments, and criticisms for the improvement of the book. Any suggestion sent to me at 'jkm_50@yahoo.co.in' will be highly appreciated.

J.K. Mitra

Features of

Chapter Outcomes

◗ Introduction ◗ Concept of Inventory ◗ Forms of Inventories ◗ Concept of Materials ◗ Types of Materials

Section I: Purchase Procedure and Purchase Control ◗ Objectives of Scientific Purchasing ◗ Responsibilities of Purchase Department ◗ Functions of Purchase Department ◗ Purchase Procedure ◗ Purchase Requisition ◗ Tenders and Quotations for the Supply of Requisite Quantity and Quality of Materials ◗ Selection of Suitable Supplier ◗ Purchase Action—Placing Purchase Order ◗ Purchase Control ◗ Methods of Purchasing

Section II: Receipt of Goods and Store-keeping ◗ Receipt of Goods ◗ Meaning and Objectives of Store-keeping ◗ Location and Layout of Stores ◗ Functions of a Store-keeper ◗ Organisation of the Stores Department ◗ Classification and Codification of Materials ◗ Methods of Codification ◗ Documents Used in Stores

Section III: Inventory Control ◗ Concept of Inventory Control ◗ Objectives of Inventory Control ◗ Responsibility for Control of Inventories ◗ Principles of Effective Inventory Control ◗ Techniques of Inventory Control ◗ Reasons for Surplus or Deficiency in Stock Verification and Accounting Treatment thereof

Section IV: Materials Accounting ◗ Stock Valuation ◗ Pricing of Materials Issues ◗ Selection of a Materials Pricing Method ◗ Determination of a suitable method of Stock Valuation ◗ Inventory (or Stock) Turnover

Section V: Accounting and Control of Material Losses ◗ Waste ◗ Scrap ◗ Spoilage ◗ Defectives

Section VI: Just in Time (JIT) Approach

Chapter Outcomes
Provide a bird's eye view of the topics covered in the chapter.

Illustration 3.4

ABC analysis of materials

The following information are known about a group of items. Classify these items into A, B and C categories.

Code number	201	202	203	204	205	206	207	208	209	210
Annual consumption (units)	300	2,800	30	1,100	40	2,200	150	800	600	80
Unit price (₹)	10	15	10	5	5	10	5	5	15	10

[C.A. (Inter)]

Solution:

Assigning Rank according to Value of Materials Consumed

Code No.	*Annual consumption (units)*	*Unit price (₹)*	*Value of consumption (₹)*	*Rank*
201	300	10	3,000	6
202	2,800	15	42,000	1
203	30	10	300	9
204	1,100	5	5,500	4

Illustrative Examples
Numerous examples are provided to lend clarity to the key concepts used in the chapters.

Review Illustrations

Problem 3.1

Economic Batch Quantity and number of orders

Compute the Economic Batch Quantity and total number of batches during the year from the following information:

Average number of units to be produced during a month—2,000 units

Set up cost per batch—₹60

Total cost of production per unit—₹5

Annual rate of interest—10% *[C.U. B.com. (Hons.) 2006]*

Solution:

U = Annual consumption = 2,000 × 12 = 24,000 units

O = Set up cost per batch = ₹60

C = Carrying Cost = 10% of ₹5 = ₹0·50

Review Illustrations
A large number of graded solved examples are provided to elucidate the concepts.

the Book

Exercises

Review Questions

3.1 Discuss the importance of scientific purchasing.

3.2 State the functions of purchasing department.

3.3 Outline the procedure to be followed in a modern factory for purchase of raw materials.

3.4 What is purchase requisition? Give a specimen of purchase requisition and state the informatio therein.

3.5 What are advantages and disadvantages of centralized stores?

3.6 Disc

3.7 Desc are u

Practical Questions

3.1 From the following particulars, calculate: (a) Re-order level; (b) Minimum level; (c) Maxin (d) Average level:

Normal usage	100 units per day	Minimum usage	60 units per d
Maximum usage	130 units per day	Economic order quantity	5,000 units
Re-order period	25 to 30 days		

[**Ans.:** (a) Re-order level = 3900 units; (b) Minimum level = 1150 units; (c) Maximum level = 7
(d) Average level = 4,275 units]

3.2 (a) Monthly demand of a product—1,000 units; (b) Cost of placing an order—₹100; (c) Annu cost per unit—₹15; (d) Normal usage—50 units per week; (e) Minimum usage—25 units (f) Maximum usage—75 units per week; (g) Re-order period—4 to 6 weeks.

Compute from the above: (i) Re-order Quantity (EOQ); (ii) Re-order Level; (iii) Minimum Maximum Level; (v) Average Stock Level.

Exercises—Review Questions and Practical Questions Exhaustive chapter-end exercises are provided to test understanding of concepts and techniques.

Solved Question Papers

(Cost and Management Accounting)

Paper I: 2013

Group–A **6 × 5**

1. **(a)** What do you mean by Costing?

[Refer to Section

(b) Mention any four objectives of Cost Accounting.

[Refer to Section

OR

A man

Cost

Paper II: 2014

Group–A **6 ×**

1. Which method of Costing would you recommend for the following industries?

(a) Construction industry; (b) Transport industry; (c) Chemical industry; (d) Ship-building industry; (e parts manufacturing industry; (f) Agricultural farming industry.

[Ans: (a) Contract Costing (or Job Costing); (b) Operating Costing; (c) Process Costing; (d)Contract C (or Job Costing); (e) Batch Costing; (f) Composite (or Multiple) Costing.]

OR

(a) Define 'Cost Centre' and 'Cost Unit'.

[Refer to Sections 1.19.

(b) Distinguish between Direct and Indirect cost.

[Refer to Sectio

2. What do you mean by Scrap of materials? State the accounting treatments of Scrap of materials. H controlled? 2

[Refer to Sectio

CU Solved Question Papers Solved previous years' question papers will give students a feel of examination and they can test their understanding of the concepts.

Brief Contents

Detailed Contents

Roadmap to Cost and Management Accounting I

Unit	*Topic and Description*	*Chapter*
Unit 1	Introduction: Definition of Costing, Cost Accounting and Management Accounting, Objectives of Cost Accounting; Importance of Cost Accounting to Business Concern, Relationship between Cost Accounting, Financial Accounting, Management Accounting; Advantages of a Cost Accounting System, Installing a Cost Accounting System, Essentials of a Good Cost Accounting System	**1**
	Cost Concepts, Terms, and Classification of Costs: Cost, Cost Object, Cost Units and Cost Centres, Types of Costs, Classification of Costs—Direct and Indirect, Elementwise, Functionwise, Behaviourwise, Sunk Cost, Opportunity Cost, Cost Sheet (Introduction Only), Total Costs, and Unit Costs	
	Costing Methods and Techniques: (Introduction Only)	
Unit 2	**Material Costs**	
	a. Purchase of Materials: Purchasing Needs and Organisation, Purchase Procedure, Documentation, Material Costs (Direct and Indirect), Determination of Material Purchase Cost	**3**
	b. Storage of Materials: Need for Storage, Location and Types, Functions of a Storekeeper, Requisition, Receipt, Issue and Transfer of Materials, Storage Record, Accounting for Material Costs	
	c. Material Control: Organization, Tools; Just-in-Time Purchase; Various Stock Levels, Economic Ordering Quantity and ABC Analysis; Periodic Inventory, Perpetual Inventory, Physical Verification; Discrepancies in Stock and Their Treatment	
	d. Methods of Pricing Material Issues: Various methods of pricing materials issues—FIFO, LIFO and Weighted Average; advantages and disadvantages of each method	
	e. Treatment of normal and abnormal loss of materials	
Unit 3	**Employee Cost:** Introduction, Recording Labour Cost: Attendance and Payroll Procedures (Time-Keeping, Time Booking, Payroll Procedure, Payment of Wages—Piece Rate, Differential Piece Rate, Time Rate), Idle Time, (Causes and Treatment in Cost Accounting), Overtime (Its Effects and Treatment in Cost Accounting), Labour Turnover—Causes, Impact and Methods of Calculating Labour Turnover; Cost of Labour Turnover	**4**
	Incentive Systems: Main Principles for Sound System of Wage Incentive Schemes; Labour Utilization; System of Wage Payment (Halsey, Halsey-Weir, Rowan and Emerson) and Incentives; System of Incentive Schemes for Indirect Workers; Component of Wages Cost for Costing Purpose	

Unit	*Topic and Description*	*Chapter*
Unit 4	**Overheads**	
	a. *Introduction:* Definition, Classification of Overhead—Element-wise, Functional and Behavioural; Various Types of Overheads	**6**
	b. *Manufacturing Overheads:* Allocation and Apportionment of Overhead; Absorption of Overhead: Various Methods and Their Application; Treatment of Under Absorption/Over Absorption of Overheads	
	c. *Administration and Selling and Distribution Overheads and their Charging:* Introduction only	
	d. *Preparation of Cost Sheet (Advanced Level) and Estimation*	**2**
Unit 5	**Cost Book-keeping**	
	1. *Non-integrated System*: Meaning and Features; Ledgers Maintained; Accounts Prepared; General/Cost Ledger Adjustment Account; Meaning of Closing Balance in Various Accounts; Disadvantages	**10**
	2. *Reconciliation*: Need for Reconciliation; Items Causing Differences between Cost and Financial Profits and their Reconciliation; Memorandum Reconciliation Statement/Account	
Unit 6	**Costing Methods**	
	Job Costing (Job Cost Cards and Databases, Collecting Direct Costs of Each Job, Attributing Overhead Cost to Jobs; Application of Job Costing). **Batch Costing**	**7**
	Contract Costing: Progress Payments, Retention Money, Escalation Clause, Contract Accounts, Accounting for Material, Accounting for Plant Used in a Contract, Contract Profit and Balance Sheet Entries	**7**
	Service Costing and Output Costing: Introduction; Motor Transport Costing only. **Single or Output Costing**	**9**
	Process Costing: Meaning, Features, Process vs Job Costing, Principles of Cost Ascertainment for Materials, Labour, and Overhead; Normal Loss, Abnormal Loss and Gain and Preparation of Process Accounts	**8**
	Inter-process Profit (Simple Cases)—Meaning, Advantages and Disadvantages and Determination of Stock Value for the Purpose of Balance Sheet	
	Need for Valuation of WIP, Equivalent Production (Units) and Preparation of Process and Other Relevant Accounts Valuing WIP under Average Method and FIFO Method (Simple Cases)	

1

Basics on Cost and Management Accounting

Chapter Outcomes	Syllabus Mapping
◗ Accounting — an Information System ◗ Branches of Accounting ◗ Financial Accounting Vs. Management Accounting ◗ Cost Accounting Vs. Financial Accounting ◗ Cost Accounting Vs. Management Accounting **Section-A:** ***Nature and Scope of Cost Accounting*** ◗ Nature of Cost Accounting ◗ Scope of Cost Accounting ◗ Concept of Cost ◗ Cost, Expense and Loss ◗ Concept of Costing ◗ Concept of Cost Accounting ◗ Concept of Cost Accountancy ◗ Interrelationship of Costing, Cost Accounting and Cost Accountancy ◗ Difference between Costing and Cost Accounting ◗ Difference between Cost Accounting and Cost Accountancy ◗ Objectives of Cost Accounting ◗ Methods of Costing ◗ Techniques of Costing ◗ Cost Centre ◗ Cost Unit ◗ Difference between a Cost Centre and a Cost Unit ◗ Installation of a Cost Accounting System ◗ Advantages of Cost Accounting ◗ Limitations of Cost Accounting **Section-B:** ***Nature and Scope of Management Accounting*** ◗ Concept of Management Accounting ◗ Nature of Management Accounting ◗ Scope of Management Accounting ◗ Objectives of Management Accounting ◗ Functions of Management Accounting ◗ Limitations of Management Accounting	**Unit 1**

1.1 Accounting—An Information System

Accounting is a business language. Every language has a grammar and it is necessary to have a good command over the grammar to understand the language. Accounting has also its grammar, generally called accounting principles. It is essential to acquaint with the accounting principles to read and understand the accounting statements.

Accounting is defined as a system for collecting, summarising, analysing, presenting and reporting, in monetary terms, the relevant information about the enterprise. The overall objective of an accounting information system is to provide information to various users. The inputs for an accounting system are usually economic events. The output of an accounting information system serves as the basis for users' actions. As a business language, accounting communicates business transactions and their results to various interested parties.

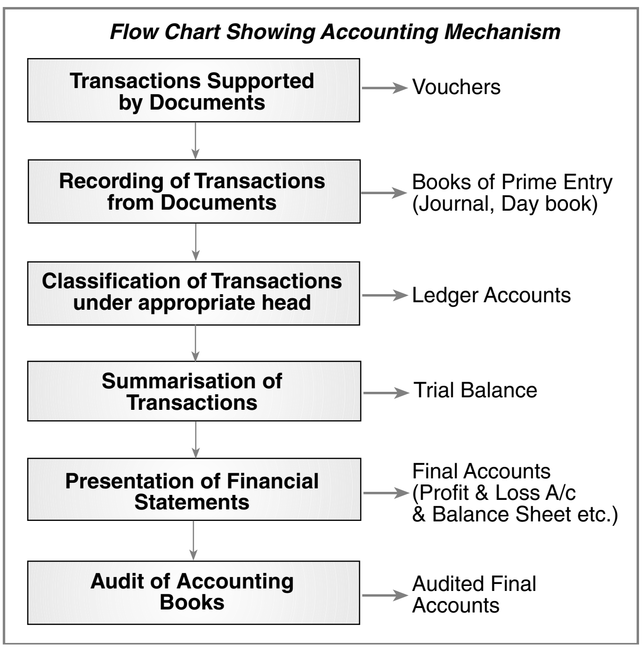

Fig. 1.1

1.2 Branches of Accounting

Three main branches of accounting are:

(1) Financial Accounting;

(2) Cost Accounting; and

(3) Management Accounting.

1.2.1 Financial Accounting

Financial Accounting records monetary transactions, prepares necessary accounts, analyses and interprets financial statements. It reveals the profitability and financial results of a business concern over a particular period of time.

The main purposes of Financial Accounting are:

(i) To record the transactions affecting the business;

(ii) To prepare the necessary accounts and balance sheet;

(iii) To evaluate the results of operations over a particular period;

(iv) To report results on year to year basis;

(v) To furnish information on both the operating and non-operating activities;

(vi) To provide information on end-result to various interested parties for taking proper decisions.

1.2.2 Cost Accounting

Cost accounting is accounting for costs. Cost Accounting may be regarded as a specialised branch of accounting which involves collection, classification, accumulation, assignment and control of costs.

Cost Accounting is a discipline concerned with measurement and communication of cost information. It is the science, art and practice of Cost Accountants.

The main purposes of Cost Accounting are:

(i) To accumulate cost data for determining the product (or service) costs;

(ii) To provide cost data to the management for the preparation of budgets and fixing standard costs;

(iii) To assist the management in their decision making;

(iv) To ascertain the cost of products, activities, functions, processes, etc.;

(v) To apply various cost control techniques;

(vi) To improve efficiency in order to control and reduce costs.

1.2.3 Management Accounting

Management Accounting is concerned with the presentation of accounting information to the management in such a way as to assist them in their managerial functions of decision-making, planning and control. Thus, Management Accounting deals with accounting and other information for managerial decision making purposes.

The main purposes of Management Accounting are:

(i) To provide management with financial data, cost data and other qualitative information for planning and decision making;

(ii) To get an insight into the profitability, solvency, liquidity, etc., of the organisation;

(iii) To measure and interpret the results of operations with necessary comments and conclusion;

(iv) To report on the effectiveness of the organisation as regards utilisation of resources;

(v) To meet the changing needs of management functions.

1.3 Financial Accounting and Management Accounting—A Comparative Study

Financial Accounting records monetary transactions and prepares necessary accounts concerning the business. Thereafter, it analyses and interprets financial statements to serve the interests of various parties. Management accounting is concerned with the presentation of accounting information (both financial and cost) and other relevant qualitative facts to the management. These information assist the management in their managerial functions of decision-making, planning and control.

Management accounting is having its roots in financial accounting. Management Accounting data are mostly derived from financial accounting. Both financial and management accounting study the impact of business transactions and interpret results thereof. However, the differences between financial and management accounting are enumerated below:

Table 1.1 *Difference between Financial Accounting and Management Accounting*

Points of Differentiation	*Financial Accounting*	*Management Accounting*
(i) Basic function	Recording of monetary transactions and publication of financial statements.	Supporting decisions of the management by providing relevant information.
(ii) Party to be served	For use of external parties (may also be used by internal parties).	For use of internal parties only.
(iii) Format of reports	Format is specified by the relevant provisions of the Companies Act.	Format is tailored to the requirement, suitability and convenience.
(iv) Objectivity of reports	Report is supported by relevant figures. It lays emphasis on objectivity of data.	Reports may contain both the objective and subjective figures.
(v) Auditing of reports	Financial reports are subject to statutory audit.	Management reports are not subject to statutory audit.
(vi) Publication of reports	Annual reports are to be published for circulation among the external parties.	Management reports are meant for internal use only.
(vii) Period coverage	Usually one year.	As required by the management.
(viii) Availability of reports	Publicly available.	Confidential in nature.
(ix) Unit of study	Overall performance of the organisation.	Detailed study of a segment.
(x) Governed by	Companies Act.	Needs of management.

1.4 Cost Accounting and Financial Accounting—A Comparative Study

Cost Accounting and Financial Accounting rest on the same principles concerning debit and credit and have the same sources of recording transactions. Both collect, record, classify and summarise transactions and report these to the appropriate authority. However, there are differences between the two, which are as follows:

Table 1.2 *Difference between Cost Accounting and Financial Accounting*

Points of Differentiation	*Cost Accounting*	*Financial Accounting*
(i) Applicability	Cost Accounting is applicable to manufacturing concerns.	Financial Accounting is applicable to all types of accounting entity.
(ii) Principles followed	It adheres to costing concepts and principles.	It adheres to Generally Accepted Accounting Principles (GAAP).
(iii) Scope of measurement	It measures cost of each product line, department, process, etc.	It measures the financial performance of the entity as a whole during a particular period.
(iv) Requirements served	Cost Accounts are prepared as per the requirement of Management.	Financial Accounts are prepared according to the requirements of Companies Act and Income Tax Act.
(v) Periodicity of reporting	Cost reporting is a continuous process and it may be prepared as and when desired (either daily or weekly or monthly etc.)	Financial reports (Profit & Loss A/c; Balance Sheet etc.) are prepared periodically, usually at the end of an accounting period.
(vi) System of control	It provides for a detailed system of controls with the help of certain special techniques (like Standard Costing, Budgetary Control, etc.).	It does not attach importance to control the transactions.
(vii) Party to be served	It is mainly meant for providing detailed cost information to the management. Therefore, cost information are not meant for outsiders.	It is mainly meant for providing information to shareholders, creditors, government, employees, etc.
(viii) Nature of approach	It deals partly with actual figures (i.e., historical data) and partly with estimates.	It deals mainly with actual figures and thus, it is historical in approach.
(ix) Valuation of stock	Stocks are always valued at cost.	Stocks are valued at cost or market price whichever is lower.
(x) Statutory need	It is not compulsory.	It is compulsory to meet the requirements of Companies Act, Income Tax Act, etc.

1.5 Cost Accounting and Management Accounting—A Comparative Study

Management Accounting is developed because of the management's demand for information on past and present operations for predicting future trends. It integrates Cost and Financial Accounting information to analyse and interpret past and present results and providing forecasts for the future. Therefore, the scope of Management Accounting is broader than that of Cost Accounting.

However, the differences between Cost and Management Accounting are enumerated below:

Table 1.3 *Difference between Cost Accounting and Management Accounting*

Points of Differentiation	*Cost Accounting*	*Management Accounting*
(i) Principles and practices followed	It uses the principles and practices of Cost Accounting.	It uses the principles and practices of both Cost and Financial Accounting.

Points of Differentiation	*Cost Accounting*	*Management Accounting*
(ii) Nature of approach	It generally deals with current operations.	It looks ahead through long term planning apart from current operations.
(iii) Scope of study	It is a complement of Management Accounting.	It is an extension of managerial aspects of Cost Accounting.
(iv) Primary objective	The primary object is to ascertain the cost of product (or service) and to control the cost after careful analysis.	The primary object is to provide the relevant information to the management for taking appropriate decision.
(v) Main emphasis	The main emphasis is on cost determination and cost control.	The main emphasis is on efficient running of business.
(vi) Contents of report	Cost Accountant compares Actual Cost with Standard Cost and submits reports to the management regarding variances for appropriate action.	Management Accountant not only makes variance analysis but also suggests the ways and means for improving operations.
(vii) System of recording	Double entry system of recording transactions can be adopted.	Double entry system is not adopted while submitting reports to the management.
(viii) Type of data used	It deals with cost data only.	It uses both financial and cost data.
(ix) Accounting period	It is done for a specific accounting period.	It does not follow any specific accounting period as such.
(x) Derivation of data	It derives data from financial records.	It derives data from both financial records and cost records.

SECTION-A: NATURE AND SCOPE OF COST ACCOUNTING

1.6 Nature of Cost Accounting

The nature of cost accounting can be enumerated in the following ways:

(i) Branch of accounting: Cost accounting may be regarded as a specialised branch of accounting. It has its own principles, concepts and conventions. It analyses and interprets cost information and presents cost report to the management for necessary action.

(ii) Science, art and practice of cost accountants: Cost accounting is a social science as it is a body of systematic knowledge. It is an art in the sense it requires skills on the part of cost accountants in applying the principles, methods and techniques of cost accounting. It is a practice in the sense that practical application of the theoretical knowledge is a constant pursuit of cost accountants.

(iii) Regarded as profession: Cost accounting is a profession as it is a body of specialised knowledge that can be applied to practical situations. Professional knowledge on this subject can be acquired through formal education system and training programmes. In India, the Institute of Costs Accountants of India (ICAI) renders professional assistance to qualified cost accountants. It formulates a code of behaviour for its members.

(iv) Providing cost information: Cost accounting is concerned with the measurement and communication of cost information. It presents relevant cost information to the management derived from various cost records for the purpose of their managerial decision-making. Cost information (with proper interpretation) is provided to the management through cost reports.

(v) Means of controlling cost: Cost accounting is a means of controling cost. Cost control is exercised through various techniques (such as standard costing, budgetary control, inventory control, quality control, etc.). Cost control helps in utilising the available resources in the best possible manner by reducing various wastages and losses.

(vi) System of foresight: Now-a-days, cost accounting is used for forecasting the cost of the goods to be produced (or services to be rendered). The estimated cost of a product (or service) can be ascertained after careful consideration of present cost data and future trends. Cost accounting helps in the preparation of budgeted cost statements on the basis of pre-determined cost estimates.

1.7 Scope of Cost Accounting

The scope of cost accounting refers to the various areas of study under the purview of cost accounting as follows:

(i) Cost classification: This refers to the grouping of homogenous items of cost into a common group. Cost classification is a process of arranging the items of cost into certain categories on the basis of a defined criteria. Three common bases of cost classification are: (a) element-wise classification; (b) function-wise classification; (c) behaviour-wise classification.

(ii) Cost recording: This refers to the posting of cost transactions into the various ledgers maintained under cost accounting system. This involves recording of cost data according to pre-arranged classification.

(iii) Cost allocation: This refers to the allotment of costs to various departments or products on pre-determined basis. Cost allocation is the part attribution which charges specific cost to a cost centre or cost unit.

(iv) Cost determination: This refers to the determination of cost of products (or services), departments and operations of a manufacturing concern. Cost is ascertained in two ways, namely, (a) Statement method (popularly known as cost sheet or cost statement); (b) Account method (i.e., Production account is prepared under double entry principle).

(v) Cost comparison: This involves comparison of the cost of alternative products, activities and areas of operation in the field of production.

(vi) Cost control: Cost control is a device of regulating cost of output (or operation) by careful use of the techniques of cost accounting. Cost control is exercised through various techniques (such as standard costing, budgetary control, inventory control, quality control, etc.). Cost control helps in utilisation of resources in the best possible manner.

(vii) Cost reporting: This refers to furnishing relevant cost information to the management on a regular basis so as to meet the requirements of management. It is a formal system designed to ensure timely supply of pertinent cost information to the management for their policy-making and operating decisions.

(viii) Cost reduction: Cost reduction represents achievement of real and permanent reduction in the unit cost of goods manufactured and services rendered. Cost reduction may be brought about by the elimination of wasteful and non-essential elements in the design of products. The final aim of cost accounting is the reduction of real cost of goods (or services) on a permanent basis through maintaining quality.

1.8 Concept of Cost

Cost is an expenditure that has actually been incurred or that can be notionally attributed to a specified thing or activity. According to **CIMA** [Chartered Institute of Management Accountants, London] **cost** is "the amount of expenditure (actual or notional) incurred on, or attributable to a specific thing or activity."

A cost may be an **actual cost that has been incurred and ascertained after it has been incurred**. For example, the expenditure on materials incurred and ascertained in the process of producing any commodity, is a cost.

A cost may also be a **notional cost for which there has not been any cash payment (or outflow of cash) but whose benefit has been enjoyed in the process of production of a commodity (or rendering of a service)**. Rent on own premise, interest on own capital, etc., are examples of notional costs.

Thus, a cost refers to a payment which can be associated with a commodity or service. It need not necessarily be a cash payment. For this reason, **the American Accounting Association** has defined it as "**a foregoing, measured in monetary terms, incurred** or potentially to be incurred to achieve a specific objective."

Anthony and Welsch defined cost as ***"a measurement, in monetary terms, of the amount of resources used for some purposes."***

1.9 Cost, Expense and Loss

'Cost' should be distinguished from 'expense' and 'loss' though the terms cost and expense are used synonymously.

1.9.1 Cost

Cost is the amount of cash (or equivalent resources) given to acquire goods or service. Cost is incurred (or potentially to be incurred) to achieve a specific objective. It is the resources sacrificed (or benefits foregone) measurable in terms of money.

Cost includes both **expired cost and unexpired (or deferred) cost.** Expired cost represents an expenditure from which no further benefit is expected. Expired cost may be either an 'expense' or a 'loss'.

On the other hand, unexpired (or deferred) cost refers to the cost for which expenditure has been incurred but the economic benefit has not been received during the current accounting period (for example, prepaid rent, prepaid insurance, unutilised part of asset, etc.,). Unexpired (or deferred) cost does not form part of product cost. It is shown as an asset in the Balance Sheet.

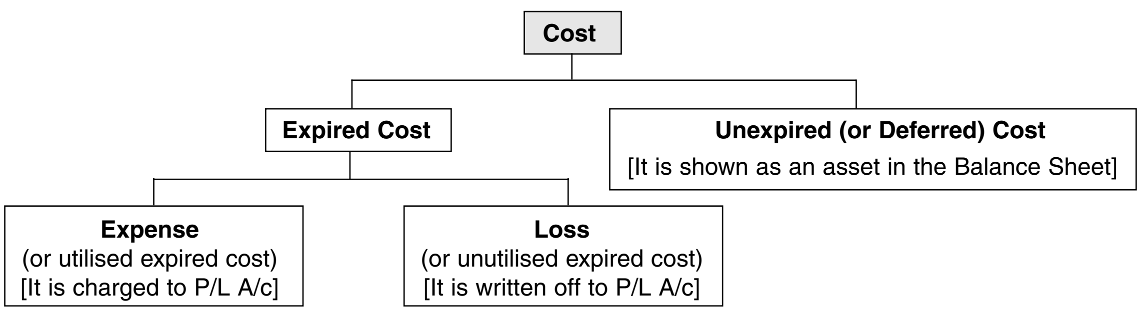

Fig. 1.2

1.9.2 Expense

An expense may be defined as an expired cost with a matching economic benefit (such as postage paid, rent paid, depreciation, etc.). Expense is that part of expired cost, the benefit (or utility) of which is directed towards the productive activities. Expense may also be referred to as utilised part of expired cost. An expense is matched (or charged) against revenue in order to arrive at the profit or loss of the period. Normally, an expense forms part of product cost and is charged to the Profit & Loss Account for that period.

[**Important points to remember:** Sometimes, the term 'expense' is used in a narrow sense in Cost Accounting. According to the element-wise classification of cost, total cost is composed of three elements of costs (i.e,. material cost, labour cost and expenses). Therefore, expense may be used to signify the cost of sevices provided to an undertaking (such as, rent, rates, taxes, cost of postage, cost of lighting & heating, insurance, maintenance cost, etc.)].

1.9.3 Loss

Loss may be defined as an expired cost without any matching economic benefit (such as, loss of stock by fire, abnormal idle time, etc.). Loss is that part of expired cost, the utility of which is lost before it is being used for productive purposes. Loss may also be referred to as unutilised part of expired cost. Normally, loss does not form part of product cost. Loss is written off by transferring it to the Profit & Loss Account.

1.10 Concept of Costing

According to the **CIMA, London,** costing refers to ***"The techniques and methods of ascertaining costs."***

Techniques are used as principles and rules for the ascertainment of cost. For example, Marginal Costing, Standard Costing, Budgetary Control, Uniform Costing, etc., are applied as techniques.

Methods are used to lead to the process (or procedure) of ascertaining costs. For examples, Job Costing, Batch Costing, Process Costing, Operating Costing, Operation Costing, etc., are used as methods of costing. Different methods and techniques embodied within costing are applied depending on the nature of the product, production procedure, etc.

1.11 Concept of Cost Accounting

Cost Accounting means accounting for costs. It is regarded as a specialised branch of accounting. It involves classification, accumulation, assignment and control of costs. It is concerned with the measurement and communication of cost information. It starts with the recording of all costs related to the manufacturing process and ends with the presentation of cost report to the management. **CIMA, London** defines Cost Accounting as "an application of costing principles, methods and techniques for determination of costs and the analysis of deviations (favourable or adverse) as compared with standards."

So, Cost Accounting renders information for the guidance of the management for proper planning, operation, control and decision making.

1.12 Concept of Cost Accountancy

Cost accountancy is a subject which is related to the accounting of goods produced or services rendered. It involves the application of cost accounting to the practice of cost control and the ascertainment of profitability. It also covers the presentation of information derived therefrom for the purpose of managerial decision making.

CIMA (London) defines Cost Accountancy as "the application of Cost Accounting principles, methods and techniques to the science, art and practice of cost ascertainment and control."

It is a science so far as it involves the application of a systematic body of knowledge. It is an art so long as it involves some skill for its application. It is a practice as practical application of the theoretical knowledge is a constant pursuit of the Cost Accountant.

1.13 Inter-relationship between Costing, Cost Accounting and Cost Accountancy

Costing = Methods and techniques of ascertaining costs.

Cost Accounting = *Costing* + Application of cost control techniques.

[Therefore, Costing is an integral part of Cost Accounting]

Cost Accountancy = *Cost Accounting* + Presentation of relevant information to the management for decision-making.

[Therefore, Cost Accountancy covers a wider field than Cost Accounting]

1.14 Difference between Costing and Cost Accounting

Points of Differentiation	*Costing*	*Cost Accounting*
(i) Basic concept	Costing is related to the techniques and processes of ascertaining costs of goods produced or services rendered.	Cost Accounting is concerned with the accounting for costs.
(ii) Accounting mechanism	It does not necessarily require formal accounting.	It involves accounting for costs.
(iii) Application of accounting principles	It does not necessitate the application of all accounting principles.	It requires the application of accounting principles.
(iv) Coverage	It is an integral part of Cost Accounting.	It encompasses a much wider field. It has to deal with the presentation and interpretations of cost data to the management.
(v) Procedure	It involves classification of expenses according to cost elements. It also deals with the allocation and apportionment of costs to the cost centres and cost units.	It involves analysis of costs for the preparation of necessary information. It is related to reporting of current and prospective costs.

1.15 Difference between Cost Accounting and Cost Accountancy

Points of Differentiation	*Costing*	*Cost Accounting*
(i) Basic concept	It is an application of costing principles, methods and techniques for determination of costs and analysis of deviations from the standards.	It is an application of cost accounting principles, methods and techniques to the practice of cost control and ascertainment of profitability.
(ii) Applicability	Its field of application is limited.	It covers a much wider area.
(iii) Objective	Its objects are determination of costs and control of costs.	Its objects are cost determination, cost control, preparation of relevant information necessary for the purpose of decision making.

Points of Differentiation	*Costing*	*Cost Accounting*
(iv) Coverage	It is an integral part of cost accountancy.	It denotes a body of knowledge involving a practice of Cost Accounting.

1.16 Objectives (or Purposes) of Cost Accounting

The main purposes of cost accounting are enumerated as follows:

(i) **Ascertainment of cost**: Cost ascertainment means computation of actual costs after they have been incurred. The primary objective of cost accounting is to ascertain the cost of various products, jobs, activities, services, etc. Ascertainment of cost is a pre-requisite for cost control and for furnishing cost information to the management for its decisions. Generally, costs are ascertained by using principles of different methods of costing.

(ii) Estimation of cost: Estimated cost is a futuristic concept. It is the process of determining in advance the cost of products, jobs, activities, services, etc. In cost estimation, an allowance is generally made for anticipated fluctuations in the prices of different elements of cost (such as material cost, labour cost and expenses). Cost estimation serves the following purposes:

(a) It is required for offering quotations of prices, sending tenders, bidding for contracts, etc.;

(b) It is useful in the preparation of various budgets;

(c) It is helpful in the evaluation of projected performance;

(d) It facilitates preparation of projected financial statements.

(iii) Control of cost: Cost control is the regulation of operating cost of an undertaking by executive action. Cost control aims at improving efficiency by controlling and reducing cost. The budgetary control and standard costing are two important techniques used to control cost. Cost control improves the efficiency by achieving maximum output at minimum cost. The cost accountant identifies the areas wherein the company has to improve its efficiency, reduce costs, wastage, etc,.

(iv) Reduction of cost: Cost reduction means real and permanent reduction in the unit cost of goods manufactured (or services rendered). It is a genuine saving in the cost by the elimination of wasteful and inessential elements from the design of the product. Cost reduction must arise from continuous scientific research. The areas of cost reduction are vast which include product design, production method, marketing, administration, finance, etc.

(v) Preparation of cost statement: Cost statement is prepared to show the different components of the total cost. It generally shows total cost, per unit cost, output produced and sold, units and value of closing stock, etc. Properly developed cost accounting system can provide ready information regarding cost of production, value of stock, etc., as and when required.

(vi) Helping in managerial decisions: Cost accounting is designed primarily to serve the needs of the management. Cost accounting provides relevant information to the management to take various decisions such as: (a) product diversification, (b) fixing of selling prices, (c) make or buy decisions, (d) selection of profitable product-mix, (e) determination of alternative methods of manufacture, (f) dropping a product line, (g) suspending activities of a region, (h) factory shut-down decision, (i) scarce resource (i.e., key factor) allocation decision, (j) effect of change in selling price, (k) level of activity planning, (l) opening of extra shift work, (m) selection of optimum volume of production etc.

1.17 Methods of Costing

Costing methods refer to the systems of collating and presenting costs for the purpose of product costing (or service costing). Several methods of costing have been designed to suit the needs of each business condition. In other words, different methods are used because business enterprises vary in their nature and in the type of the products they produce (or services they render). The basic principles of ascertaining costs are the same in all methods, but the way of analysing and presenting the costs vary from industry to industry.

Basically, there are two principal methods of costing, namely,

(1) Job Costing

Variations of Job Costing are:

(a) Batch Costing;

(b) Contract Costing (or Terminal Costing);

(c) Composite Costing (or Multiple Costing).

(2) Process Costing

Variations of Process Costing are:

(a) Operation Costing;

(b) Operating Costing;

(c) Single (or Output) Costing.

1.17.1 Job Costing (Specific Order Costing/Production Order Costing)

This refers to a method of costing in which costs are ascertained in terms of specific jobs or orders, which are not comparable with each other. Industries manufacturing products (or rendering services) against specific orders, use the Job Costing method. In the Job Costing method, an order may be taken as a Cost Unit (i.e. Job). In Job Costing, all costs of direct materials, direct labour and other direct expenses are directly charged to the specific job or product.

Applicability: Job Costing is used by organisations whose products or services can readily be identified by individual units or batches. Industries where this method of costing is generally applied are: printing presses, repair shops, ship-building, house-building, automobile garages, engine and machine construction, furniture making, hardware and machine manufacturing, consulting engagements, research projects and other industries where jobs or orders can be kept separate.

(a) Batch Costing: This method is also a special type of Job Costing. Batch Costing refers to that method of costing which determines the cost of a group of identical products. It is then used to determine the unit cost of the articles produced by dividing the total cost of the batch by the total batch quantity. It should, however, be noted that the articles produced should not lose their identity in manufacturing operations.

In batch costing, a batch constitutes the cost unit for which costs are compiled. Separate Job Cost Sheets are maintained for each batch of components manufactured and for the assembly of finished products. The cost of each batch is determined separately by charging with its own costs.

Applicability: Batch Costing can be applied to enterprises engaged in manufacturing radio, television, V. C. R., watch, electronic goods, biscuits, car, medicines, toy making, readymade garments, etc.

(b) Contract Costing (Terminal Costing/Construction Costing): In Contract Costing, a specific contract becomes the Cost Unit. A particular contract is treated as a whole job and the cost of the contract is determined accordingly. Therefore, Contract Costing is that form of Job Costing where work is undertaken as per customer's special requirements and each order is of long duration. It is also known as Terminal Costing since the job cost is completed with the completion of the work.

Applicability: Contract Costing is used in ship building, building construction, civil engineering works, aircraft manufacture, etc.

(c) Composite Costing (Multiple Costing): Multiple costing is a combination of various methods of Costing. The manufacture of certain products involves a lot of complexities. Therefore, any one of the basic methods cannot be used for collating and presenting product cost. In other words, in multiple costing, we experience the application of various costing methods. Multiple Costing is used where there are a variety of components separately produced and subsequently assembled in the complex production.

Applicability: Multiple costing is applicable to manufacturing concerns producing motor cars, machine tools, radios, sewing machines, aeroplanes, cycles, typewriters, locomotives, etc.

1.17.2 Process Costing

Process Costing is used to ascertain the cost of the product at each process, operation or stage of manufacture. In process costing, production follows a series of sequential processes. The finished goods of the earlier process becomes the raw materials of the latter process. Costs are identified for each process and charged to that process. Cost of each process is determined separately. It is suitable for organisations which manufacture goods on a continuous basis.

Applicability: Process Costing is generally adopted in textile industries, chemical industries, oil refineries, soap manufacturing, paper manufacturing, paints, food processing, steel, rubber industries, etc.

(a) Operation Costing: A manufacturing process may sometimes be divided into a number of parts, each of which is known as an operation. Operation Costing refers to the determination of cost of each operation. It is a special type of Process Costing. The cost unit is the 'operation' instead of the process. The per unit cost is arrived at by dividing the total cost of an operation by the number of units completed in the operation centre. For large undertakings, it is frequently necessary to ascertain the cost of various operations. The procedure for costing of operations is broadly the same as for Process Costing. Cost control can be exercised more effectively with Operation Costing.

(b) Operating Costing: This method of costing is applicable to undertakings which provide services. Here, the cost of whole services rendered is ascertained. Thereafter, total costs of the operation are divided by the total units and cost per unit of service is arrived at.

Where an undertaking (or a department within an undertaking) provides services, the costing method used is termed as Operating Costing. Service organisations do not make or sell tangible goods. Service organisations include transport companies, hospitals, schools, etc.

Applicability: Operating Costing is applicable to:

(i) Transport concerns (railways, motor cars, shipping and air transport);

(ii) Public utility concerns (electricity, gas, hospitals, telephones, schools, colleges, etc.);

(iii) Catering establishments (hotels, canteens, hostels, etc.).

(c) Single (or Output) Costing: This method is used where a single article is produced (or a service is rendered) by continuous manufacturing activity. The cost of whole production cycle is ascertained as a process. The per unit cost is obtained by dividing the total cost by the total number of units manufactured. The unit of cost is chosen according to the nature of the product, e.g. for coal and iron ore, the cost unit is "per ton"; for brick, the cost unit is "per thousand brick" etc.

Applicability: This method is suitable in industries like brick-making, cement manufacturing, collieries, flour-mills, etc.

1.18 Techniques of Costing

Costing techniques refer to the manner in which it is decided to present cost information to the management. The following five basic techniques are commonly used by Cost Accountants:

(i) Marginal Costing: This is an important technique used for decision making. It refers to the ascertainment of marginal costs by differentiating between fixed costs and variable costs and the effect on profit of the changes in volume. In marginal costing, there is no room for semi-variable costs. Semi-variable costs are split up into variable and fixed elements. Variable portion of semi-variable cost is added with variable cost and fixed portion of semi-variable cost is added with fixed cost.

In marginal costing, only variable costs are charged to products (or operations) while fixed costs are attributed to the business in general (i.e. fixed costs are written off in full in the period to which they are attributable). In other words, fixed cost is not allocated to Cost Units.

(ii) Standard Costing: Standard Costing is used as an effective tool for planning and control of costs. It is a technique where standard costs are determined in advance. After the production, actual costs are compared to standard costs to develop variances. Once the variances (favourable or adverse) are determined, the management finds out the reasons for such variances for taking remedial measures. Standard Costing provides the base for control through variance accounting. It helps the management to maintain maximum efficiency in production.

(iii) Budgetary Control: Budget should be viewed as an activity plan. Budgets are prepared for each and every function and accordingly targets are fixed for each executive who is responsible for achieving results.

Budgetary Control should be viewed as a feedback system. Actual performances are continuously compared with budgets and variance reports are issued, as a feedback to executives at all levels.

Budgetary Control is defined as, "The establishment of budgets relating to responsibilities of executives to the requirements of a policy and the continuous comparison of actual results with budgeted results either to secure by individual action the objective of that policy or to provide a basis for its revision."

[C.I.M.A. Official Terminology]

Budgetary Control refers to:

(a) Establishment of a budget for a defined period of time;
(b) Continuous comparison of actual results with budgeted results;
(c) Investigation into the deviations (variances) arising out of such comparison;
(d) Finding out the causes of variances;
(e) Taking corrective actions to remedy the causes in order to achieve the defined objectives;
(f) Planning again by considering feed-back.

Budgetary control is an aid to management for controlling costs and maintaining maximum efficiency in production.

(iv) Historical Costing (or Absorption Costing): This refers to the ascertainment of costs after they have been incurred. This is also termed as *traditional costing*. This technique takes into account the total costs of running an enterprise. An effort is made to absorb the entire cost into the individual units. This technique is also called *"full costing"*. This technique does not help in exercising control on costs.

(v) Uniform Costing: Uniform Costing is the use of the same cost accounting principles and/or practices by several undertakings. Uniform Costing promotes operating efficiency by ensuring *inter-unit* and *inter-firm* comparison. Here, a number of manufacturers under common control, may lay down definite and detailed instructions regarding uniform procedures to be adopted. It helps in increasing productivity and locates the 'Weakest Spots' of member concerns.

1.19 Cost Centre

Cost Centre is the smallest segment of activity (or area of responsibility) for which costs are ascertained. Such a sub-division helps in the collection of costs and absorption of costs to cost units.

Cost Centre may be a location or person or item of equipment or group of all these in respect of which cost may be ascertained and used for the purpose of Cost Control. So, a Cost Centre may be a warehouse or an individual or a machine in the factory.

CIMA, London, defines a Cost Centre as "a production or service location, function, activity or item of equipment whose costs may be attributed to cost units." It may be a location (such as, department, section, storeyard, sales area); a person (such as, a salesman, a foreman, a machine operator); an item of equipment (such as, a machine, a delivery van) or a group of all these. The cost centres are known as 'responsibility centres' as control is exercised over costs in relation to particular cost centres. For a cost centre, the person in its charge is responsible for the control of its costs.

Cost centres help in the process of recovery of overheads. For the correct ascertainment and control over costs, prudent division of cost centres become necessary. Otherwise, too many cooks may spoil the broth.

1.19.1 Types of Cost Centre

(i) Personal Cost Centre: Personal Cost Centre consists of a person or group of persons.

(ii) Impersonal Cost Centre: An impersonal cost centre consists of a location or item of equipment or group of these. A cost centre, determined according to location, may be an area or region of sales, a depot or warehouse.

There are two main types of cost centres in manufacturing concerns:

(a) Production Cost Centres: These centres are engaged in production work. Machine shops, Assembly shops are examples of production cost centres in a factory.

(b) Sevice Cost Centres: These centres render valuable services to production centres. Only indirect costs are charged to Service Cost Centres. A few examples of Service Cost Centre are:

(i) Administration Centres, e.g. General office, Accounts office, Cash section;

(ii) Material Service Centres, e.g. Stores, Internal transport;

(iii) Personal Service Centres, e.g. Labour office, Canteen;

(iv) Plant Maintenance Centres, e.g. Tool room, Carpenter shop.

1.20 Cost Unit

Cost unit is a quantitative unit of product (or service) in relation to which costs are ascertained (or expressed). A cost unit differs from industry to industry. The unit selected should be one which is the most natural to the business and is acceptable to all concerned.

Examples: (i) Cost per kg. of sugar; (ii) Cost per 1,000 bricks; (iii) Cost per tonne of cement, etc.

More typical examples of Cost Units are given below:

Industry or Product	**Cost Unit**
Transport	Tonne-Kilometre; Passenger-kilometre
Steel	Per ton
Cement	Per ton
Power (Electricity)	Kilo-watt hour
Automobile	Number
Cable	Metre or Kilometre
Gas	Cubic metre
Mines and Quarries	Tonne
Chemical	Litre
Fertilizer	Per ton
Television/Radio/VCR	Per set
Building	Per square ft
Nuts and bolts	Gross

1.21 Difference between Cost Centre and Cost Unit

Cost Centre	*Cost Unit*
1. A cost centre is the smallest segment or activity or area of responsibility for which costs are ascertained.	1. A cost unit is a quantitative unit of product or service in relation to which costs are expressed and ascertained.
2. A cost centre is one segment of the total organisation.	2. A cost unit is the unit of expressing cost.
3. A cost centre helps to determine costs by location, person, etc.	3. A cost unit is used for the sub-division of costs which may be attributed to the products or services.
4. A cost centre is devised before applying the cost unit.	4. Application of cost unit arises after the functions of devising cost centres are over.
5. A concern which even produces only one product (or renders only one service) may have several cost centres.	5. A cost unit is assigned to one distinct product or service.

1.22 Installation of a Cost Accounting System

For appropriate treatment of costs and correct reporting of cost information, a sound cost accounting system should be installed in an organisation. But there is no standard system that may become suitable for every organisation. So, considering some factors, the details of the cost accounting system should be worked out. These factors are:

(i) Nature of the product and nature of the organisation: All products do not absorb costs in the similar way. Some products need more use of materials than other elements of costs. For such material-intensive products, the cost accounting system must include inventory control measures. Where more use of labour is important, there should be labour cost control measures. Where overheads are incurred at a high rate, the cost accounting system should contain ample measures for proper recovery of overheads.

The structure of the organisation, size, layout, the requirements related to its managerial control, etc, also govern the nature and pattern of the cost accounting system.

(ii) Workability: The system installed must be workable in the organisation. It should be easily understandable. It should be easy to apply.

(iii) Economy of cost: The costs of installing and operating the system should be economical.

(iv) Manufacturing process: The nature of manufacturing process should be carefully studied. The types of materials used, their quantity and quality, the nature and degree of automation applicable and the peculiarities of the production process should be kept in mind. The technical aspects and the human factors should get equal attention.

(v) Reporting ability: The system should be so devised that the receivers of information, particularly the persons authorised to take managerial decisions, are benefitted.

(vi) Documents involved: The documents (like forms and vouchers) to be used in the cost accounting procedure, should be ascertained. The volume of clerical work and costs should be kept minimum.

(vii) Nature of selling the products: In some concerns, the production is carried on as per the customers' orders. Some concerns manufacture for general sales. The cost accounting system depends upon nature of selling the products.

1.22.1 Guidelines (or Steps) for Installation of a Cost Accounting System

The following guidelines (or steps) may be suggested for installing a sound cost accounting system:

(i) Study the objectives to be achieved;

(ii) Study the nature of the product to be produced;

(iii) Study the size and nature of the organisation;

(iv) Study the nature of materials required, methods related to their purchase, receipt, storage and issue;

(v) Study the method of wage payments to be followed;

(vi) Ascertain the clerical documents required and the cost of documentation;

(vii) Ascertain the information requirements of different cost centres;

(viii) Consider the effects of increase or decrease of operations on variable costs;

(ix) Ascertain the level of integrating cost accounting and financial accounting records;

(x) Decide whether the system will economise costs;

(xi) Ensure the accuracy of the data collected;

(xii) Consider external factors like government regulations and integrity of departments involved;

(xiii) Study the marketing procedure, policy and set up;

(xiv) Consider the suitability of the system and its reporting efficiency; and

(xv) Decide the applicability of costing techniques like Marginal Costing, Budgetary Control, etc.

1.23 Advantages of Cost Accounting

(a) As an aid to the Management: The various advantages derived by the management from a good system of Cost Accounting are as follows:

(i) A cost accounting system locates unprofitable activities, losses and inefficiencies occurring in various forms of waste;

(ii) Cost accounting is useful for price fixation, submission of quotation, tender, etc.;

(iii) Cost accounting locates the causes for increase or decrease in the profit or loss of the organisation;

(iv) Proper cost information makes it possible for the management to distinguish between profitable and non-profitable operations. Profit can be maximised by concentrating on profitable operations;

(v) More reliable and accurate financial accounts can be prepared with the help of perpetual inventory system of stock control;

(vi) Inter-firm comparisons will enable the management to study the causes of unfavourable developments. A cost comparison helps in cost control;

(vii) Adequate cost records provide the management with such data as may be necessary for preparation of Profit & Loss Account and Balance Sheet at such interval as may be desired by the management;

(viii) The introduction of effective cost accounting system prevents manipulation and fraud.

(b) As an aid to Creditors: Investors, banks and other money lending institutions are benefitted immensely by the installation of an efficient system of cost accounting. They can base their judgement about profitability and future prospects of the enterprise when there is a sound cost accounting system.

(c) As an aid to Employees: Employees are benefitted by a number of ways by the installation of an efficient system of cost accounting. They are benefitted through continuous employment and higher remuneration by way of incentives, bonus plans, etc. Thus, an effective cost accounting system ensures maximum utilization of human resources.

(d) As an aid to the National Economy: An efficient system of cost accounting brings prosperity to the business enterprise, which in turn, results in increasing Government revenue. The overall economic development of a country takes place as a result of an increase in production. A cost accounting system provides ready figures for use by the Government, Wage Tribunals, Trade Unions, etc., for settling to problems like price fixation, price control, wage level fixation, payment of dividends, tariff protection etc.

1.24 Limitations of Cost Accounting

Some objections have been raised against cost accounting system despite its numerous benefits. These objections are as follows:

(i) Duplication of work: A good number of business concerns have proved themselves efficient even without using cost accounting system. It is argued that cost accounting system is not necessary as it involves duplication of work. So it is unnecessary and creates a burden to the organisation.

(ii) Unsuitable for many industries: It cannot advantageously be applied to all types of industries. There is no such cost accounting system which can readily be applied to all industries (especially, certain unique or special type industries).

(iii) Failure to produce desired results: The adoption of cost accounting system has failed to produce the desired result in many industries.

(iv) Expensive system: The installation and operation of a cost accounting system requires a huge initial capital expenditure and high operating expenses.

(v) Stereotyped and mechanical system: This system is stereotyped and mechanical as it involves filling in large number of forms continuously. It degenerates itself into merely one of forms and rulings.

(vi) Excessive estimation: Cost computation involves a large number of conventions, estimations, arbitrary allocation of joint costs, etc. As a result, no costs can be said to be exact. This leads to misleading picture on the cost statement and on cost information.

(vii) Relative approach: Accuracy in cost accounting is relative. Certain assumptions are always made while ascertaining cost to suit a particular situation. Thus, costs presented by two cost accountants may not always be identical.

(viii) Unsuitable for all purposes: No single cost is suitable for all purposes and under all circumstances. The computation and presentation of a particular cost depends on the purpose to which cost data are required.

(ix) Improper analysis of notional cost: Notional cost is a hypothetical cost for which there is no outflow of cash (such as rent on own premise, interest on own capital, etc.). Notional cost should be properly attributed to a specific product, job, activity, etc. The purpose of cost accounting cannot be fulfilled without proper analysis and allocation of notional cost.

SECTION-B: NATURE AND SCOPE OF MANAGEMENT ACCOUNTING

1.25 Concept of Management Accounting

Management accounting is concerned with the presentation of accounting information to the management for assisting their managerial functions of decision-making, planning and control. Management accounting is developed because of managements' demand for information on past and present operations, for predicting future trends. Management accounting system acts as ***decision support system*** for providing the right information to the right people at the right time. It deals with accounting information for managerial decision-making purposes.

Management accounting is dynamic and forward-looking. It provides various techniques for solving problems, making decisions, planning and controlling the business. It aims to help managers to run their organisations smoothly. It is a value adding process that guides management's action and motivates behaviour of organisational people. Management accounting information can be both financial (i.e., monetary) and non-financial (such as process time, quality, customer satisfaction, employee capabilities, new product performance, etc.). Management accounting information is an informational source for decision-making, improvement and control in the organisation. Effective management accounting system can create considerable value to organisational success.

1.26 Nature of Management Accounting

The nature of management accounting can be enumerated as follows:

(i) Advisory in nature: It provides relevant information to the management to achieve an organisation's strategic, tactical and operating objectives. It gets an insight into the profitability, solvency, liquidity, etc., of the organisation and renders advise to the management in these regards.

(ii) Analytical in nature: Management accounting is analytical in nature. It analyses and interprets accounting and other data to make them understandable and usable to the management. Such an indepth analysis assists the management in pinpointing responsibilities and to effect necessary changes in the organisational set-up.

(iii) Interpreting results of operation: It measures and interprets the results of operations at all levels of management with necessary comments and conclusions. It reports on the effectiveness of utilisation of resources at various levels of the organisation.

(iv) Aid to the management: It provides both quantitative and qualitative information to the management to assist them in their managerial functions of decision-making, planning and control.

(v) Feedback control: It expresses financially the plans in terms of individual responsibilities for all levels of management. It develops a chain of responsibility reporting and monitors performance against plans.

(vi) Future oriented: Management accounting is forward-looking and dynamic. It processes historical data for projecting the future trends in order to make better decisions.

(vii) Absence of standard format: There is no standard format to present management accounting information. Management accountant prepares formats according to the demand of the situation. Thus, style of presentation of information is tailored to the requirement of the situation.

(viii) Selective approach: It takes into account only relevant information which are affecting decision-making from voluminous financial and cost data. It provides useful and understandable information to the management for their proper decision-making.

1.27 Common Database for Cost and Management Accounting

Cost accounting and management accounting both utilise the same basic data to a significant extent. Cost accounting gathers information about production, personnel, other facilities, etc., to determine the cost of goods sold during the period. Management accounting uses the same data to develop budgets, performance reports and analyses the same for other decisions. Much of the data used to generate cost accounting reports, is also used to prepare management accounting reports. Therefore, in most of the cases, the common data are used in preparing both cost accounts and management accounts. A sound cost accounting system manages the database to provide both cost accounting information and managerial accounting information. However, the management accounting data is derived both from the cost accounts and financial accounts.

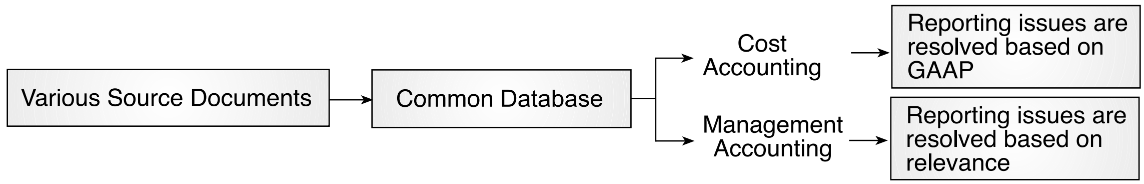

Fig. 1.3

1.28 Scope of Management Accounting

The management accounting covers the following areas of knowledge:

(i) Financial accounting: Management accounting data are mostly derived from financial accounting. Management accounting is having its roots in financial accounting. Both study the impact of business transactions and interpret the results thereof.

(ii) Cost accounting: Management accounting involves the application of appropriate techniques and concepts drawn from cost accounting. Management accounting can be viewed as an extension of managerial aspects of cost accounting. However, the scope of management accounting is broader than the scope of cost accounting.

(iii) Management Information System (MIS): MIS provides relevant information to the management for its decision-making. Computer adds new dimension to MIS by facilitating the processing of large volume of data with huge speed and accuracy. MIS is expected to supply information as needed at different levels in the organisation.

(iv) Quantitative Techniques: The Operation Research (OR) technique is used by management accountants to solve the existing problems in the decision-making process. In a decision-making situation, all variables are quantified for the purpose of analysis. Operation research makes an attempt to diagnose and tackle a problem by optimum utilisation of resources. Operation research techniques include linear programming, simulation method, queing (or waiting line) theory, transportation theory, game theory, etc.

(v) Statistical Tools: Business forecasting refers to the statistical analysis of past and current movements for obtaining clues about the future trend. Time series analysis, regression analysis, extrapolation, etc., are often used in management accounting for predicting the future trend. Forecasting facilitates the planning function of management. Forecasting provides information about future risks and uncertainties of the business.

(vi) Just-in-Time (JIT) Technique: JIT approach is an operational control technique. JIT approach is used in management accounting for elimination of wastes and continuous improvement of productivity. The objective of JIT approach is to purchase, produce and deliver products just when needed. JIT ensures overall qualitative improvement of the organisation.

(vii) Total Quality Management (TQM): Quality plays a key role in keeping costs low, revenues high and profits robust. TQM aims at zero defect (i.e., products free from all kinds of defects). Improved quality and customer service would result into high reputation of the organisation. Management should try to create a quality environment to eliminate all kinds of defect.

(viii) Benchmarking Technique: Benchmarking is the process of studying and adapting the best practices of competing organisations to improve the organisation's own performance. Benchmarking helps to understand own performance against the best practice in the industry. It measures how well an organisation and its managers are performing. Benchmarking is a modern technique for strategic improvement.

(ix) Management By Objectives (MBO): MBO is a technique which helps a manager to achieve his objectives in an efficient manner. MBO leads to effective management by integrating the goals of an organisation and individuals. It increases the organisational capability of achieving goals at all levels through a high degree of satisfaction among employees.

(x) Management Reporting: It provides relevant information to various levels of management in the forms of reports at regular intervals. It supplies data for policy-making and operating decisions. It is an instrument for making decisions and controls effective. Management takes proper decisions on the basis of these reports.

1.29 Objectives of Management Accounting

Management accounting acts as a decision-support system for providing right information to the right people at the right time. The objectives of the management accounting can be enumerated from the following points:

(i) Interpretation of financial results: Management accounting analyses and interprets the financial results of the concern. Various tools (such as ratio analysis, fund and flow statement, etc.) are used by the management accountant for analysing and interpreting financial position of the organisation.

(ii) Proper planning: Management accounting helps in preparation of plans and policies of an organisation. Management accountant uses various forecasting techniques (such as Regression analysis, Time series analysis, etc.) to predict the future trends. Forecasting is necessary for planning process. Planning is the strategic area of management.

(iii) Proper controlling: Management control is a process that assures use of resources effectively and efficiently for achieving objectives of the organisation. The management accountant uses various techniques for ensuring efficient managerial control (such as standard costing, budgetary control, internal audit, responsibility accounting, management audit, etc.).

(iv) Proper communication: Communication has become an essence of management. Management functions cannot be performed efficiently without effective network of communication in the organisation. MIS supplies information as needed at different levels in the organisation. This system is used by the management accountant for supplying relevant information to various levels in the organisation.

(v) Making decisions: Decision-making is necessary for effective functioning of management. The success of management depends on the quality of decision. Management accountant helps the management in taking various decisions (by applying marginal costing, differential costing, etc.).

(vi) Tax planning: Management accountant helps the management in determining various tax reliefs and rebates. He assists the management in planning, computation of different tax liabilities and reduction of burden of tax.

1.30 Functions of Management Accounting

Management accounting is called management-oriented accounting. The following are the major functions of management accounting:

(i) Supplying relevant information: Management accounting furnishes relevant facts and figures to the managerial personnel. It assists management to take appropriate decisions on the basis of supplied information. It presents pertinent data to the management whenever required and in the suitable form.

(ii) Presenting modified data: It modifies extracted data to suit the requirements of the decision. Relevant information is extracted from voluminous data and presented in a suitable form as desired by the management. It modifies data to serve the need of the decision under consideration.

(iii) Interpretation of accounts: Financial data are to be analysed and interpreted properly to get an insight into the profitability, solvency, liquidity, etc., of the organisation, Management Accountant analyses and interprets financial data and presents the results with necessary comments to the management.

(iv) Ensuring overall control: Management accounting identifies areas where managerial control is desired. It uses various tools and techniques (such as standard costing, budgetary control, responsibility accounting, etc.) for identifying weak areas where appropriate managerial attention is needed. It also identifies the factors and personnel who are responsible for the poor performance. Management can take corrective measures on the basis of these information.

(v) Providing qualitative information: Management accountant submits comprehensive reports to the management which include both quantitative and qualitative information. Qualitative information (such as performance of employees, motivation of workers, reputation of the concern, customer satisfaction, etc.) are also relevant for the decisions under consideration.

1.31 Limitations of Management Accounting

Management Accounting suffers from the following limitations:

(i) Wide scope: The scope of management accounting is very vast. It requires the services of cost accounting, financial accounting, operation research, statistics, production engineering, etc. It is difficult to develop a management accounting department with people who have full knowledge of all these disciplines.

(ii) High installation cost: It is necessary to make an elaborate arrangements for installing a sound management accounting system. This requires high initial cost. Moreover, the operating (or running) cost of management accounting department is also high. As a result, small organisations cannot afford to instal this system.

(iii) Reliance on accounting data: Management accountant relies heavily on the quantitative data (i.e., financial as well as cost data). Management reporting is based on the data gathered from financial and cost books of accounts. The entire effort of management accountant becomes useless when financial and cost accounts fail to provide true and fair view.

(iv) Lack of objectivity: Management accountant uses both quantitative and qualitative information when preparing reports for the management. Reports (especially qualitative information) are influenced by personal judgement. Therefore, management reports may be subjective and lack objectivity.

(v) Inability to respond to changing environment: The traditional system of keeping records no longer provides accurate information about the efficiency and profitability of internal operations. As a result, management accounting system fails to respond to rapidly-changing environment. It fails to support the strategic management decisions of the organisation.

Exercises

Review Questions

1.1 Define Cost. Distinguish between Costing and Cost Accounting.

1.2 What is Costing? What are its objects and advantages?

1.3 Explain the following methods of Costing and state the name of industries to which they are applicable:

(i) Job Costing, (ii) Process Costing, (iii) Operating Costing, (iv) Batch Costing, (v) Operation Costing (vi) Multiple Costing, (vii) Contract Costing.

1.4 Explain the following techniques of Costing: (i) Marginal Costing, (ii) Standard Costing, (iii) Uniform Costing, (iv) Historical Costing.

1.5 (a) What is a Cost Centre? Explain various types of it.

(b) Define Cost Unit. Give Six examples of Cost unit applicable to different industries.

1.6 (a) Explain the utility of maintaining a Cost Accounting System.

(b) As a consultant, how would you proceed to install a suitable cost accounting system in a large manufacturing concern?

1.7 "Cost Accounting has become an essential tool of management,"—Give your comments on this statement.

1.8 What is the importance of Cost Accounting to the management in the discharge of their function?

1.9 State the limitations of Cost Accounting.

1.10 (a) Discuss the relationship between Cost Accounting and Financial Accounting.

(b) Discuss the relationship between Cost Accounting and Management Accounting.

1.11 Discuss the nature and scope of Cost Accounting?

1.12 Define management accounting. Discuss the nature and scope of management accounting.

1.13 What are the objectives of cost and management accounting?

1.14 State the functions of management accounting.

1.15 Discuss the limitations of both cost and management accounting.