This Study Material has been prepared by the faculty of the Board of Studies. The objective of the Study Material is to provide teaching material to the students to enable them to obtain knowledge in the subject. In case students need any clarification or have any suggestion for further improvement of the material contained herein, they may write to the Director of Studies.

All care has been taken to provide interpretations and discussions in a manner useful for the students. However, the Study Material has not been specifically discussed by the Council of the Institute or any of its Committees and the views expressed herein may not be taken to necessarily represent the views of the Council or any of its Committees. Permission of the Institute is essential for reproduction of any portion of this material.

© The Institute of Chartered Accountants of India

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior permission, in writing, from the publisher.

Edition : July, 2017

Website : www.icai.org

E-mail : bosnoida@icai.in

Committee/Department : Board of Studies

ISBN No. : 978-81-8441-881-1

Price : ₹ 300/- (For All Modules)

Published by : The Publication Department on behalf of The Institute of Chartered Accountants of India, ICAI Bhawan, Post Box No. 7100, Indraprastha Marg, New Delhi 110 002, India.

Printed by : Sahitya Bhawan Publications, Hospital Road, Agra -282 003 July/2017/P2117 (New)

© The Institute of Chartered Accountants of India
BEFORE WE BEGIN....

The traditional role of a Chartered Accountant restricted to accounting and auditing, has now changed substantially and there has been a marked shift towards strategic decision making and entrepreneurial roles that add value beyond traditional financial reporting. The primary factors responsible for the change are the increasing business complexities on account of plethora of laws, borderless economies consequent to giant leap in e-commerce, emergence of new financial instruments, emphasis on corporate social responsibility, significant developments in information technology, to name a few. These factors necessitate an increase in the competence of Chartered Accountants to take up the role of not merely an accountant or auditor, but a global solution provider. Towards this end, the scheme of education and training is being continuously reviewed so that it is in sync with the requisites of the dynamic global business environment; the competence requirements are being continuously reviewed to enable aspiring chartered accountants to acquire the requisite professional competence to take on new roles.

Under the Revised Scheme of Education and Training, at the Intermediate Level, you are expected to not only acquire professional knowledge but also the ability to apply such knowledge in problem solving. The process of learning should also help you inculcate the requisite professional skills, i.e., the intellectual skills and communication skills, necessary for achieving the desired professional competence.

The entire syllabus has been divided into fifteen chapters. The chapters have been grouped into two modules

- **Module- 1 Consisting of seven chapters namely :**
  - Chapter- 1 : Introduction to Cost and Management Accounting
  - Chapter- 2 : Material Cost
  - Chapter- 3 : Employee Cost and Direct Expenses
  - Chapter- 4 : Overheads: Absorption Costing method
  - Chapter- 5 : Activity Based Costing (ABC)
  - Chapter- 6 : Cost Sheet
  - Chapter- 7 : Cost Accounting Systems

© The Institute of Chartered Accountants of India
• **Module- 2 Consisting of eight chapters namely:**
  
  Chapter- 8 : Unit & Batch Costing  
  Chapter- 9 : Job and Contract Costing  
  Chapter- 10 : Process & Operation Costing  
  Chapter- 11 : Joint Products & By Products  
  Chapter- 12 : Service Costing  
  Chapter- 13 : Standard Costing  
  Chapter -14 : Marginal Costing  
  Chapter -15 : Budget and Budgetary Control  

The content for each chapter at the Intermediate level has been structured in the following manner –

1. **Learning Outcomes** – Learning outcomes which you need to demonstrate after learning each topic have been detailed in the first page of each chapter. Demonstration of these learning outcomes would help you to achieve the desired level of technical competence.

2. **Chapter Overview** - As the name suggests, this chart/table would give a broad framework of the contents covered in the chapter.

3. **Introduction** – A brief introduction is given at the beginning of each chapter, which would help you get a feel of the topic.

4. **Content** - In each chapter, the topics have been covered following ‘step by step’ approach. The concepts are explained in student-friendly manner with the aid of Examples/illustrations/diagrams/flow charts as per requirement. These value additions would help you develop conceptual clarity and to get a good grasp of the topic. Diagrams and Flow charts would help you understand the concepts in a better manner. Illustrations would help you understand the application of concepts/provisions.

5. **Illustration with answers** – Illustrations and examples have been included in the Study Material systematically, after discussion on each topic, so that application of the concept can be understood very clearly. This would also enable you to learn and sharpen your application skills and test your understanding.

6. **Let us recapitulate** – A summary of the chapter is given at the end to help you revise what you have learnt. It would especially help you to revise the chapter(s) quickly the day before the examination.

© The Institute of Chartered Accountants of India
7. **Test your Knowledge** - This comprises of Multiple Choice Questions, Theoretical Questions and Practical Problems with solutions which test the breadth and depth of your understanding of the topic.

In this Study Material, formats of Financial Statements (i.e. Balance Sheet, Income Statements etc) and financial terms used are for illustrative purpose only. For appropriate format and applicability of various Standards, students are advised to refer the study material of appropriate subject(s).

Every effort has been made to make the Study Material error free, however if inadvertently any error is present and found by readers they may send it to us immediately, so that it can be rectified at our end.

In case you need any further clarification/ guidance, you may send your queries at sanjit.sharma@icai.in; and nnsengupta@icai.in.
SYLLABUS

PAPER – 3 : COST AND MANAGEMENT ACCOUNTING

(One paper – Three hours – 100 Marks)

Objectives :
(a) To develop an understanding of the basic concepts and applications to es-
tablish the cost associated with the production of products and provision
of services and apply the same to determine prices.
(b) To develop an understanding of cost accounting statements.
(c) To acquire the ability to apply information for cost ascertainment, planning,
control and decision making.

Contents :
1. Overview of Cost and Management Accounting
   (i) Introduction to Cost and Management Accounting
       (a) Objectives and Scope of Cost and Management Accounting,
       (b) The users of Cost and Management accounting information, Func-
tions of management accounting.
       (c) Role of cost accounting department in an organisation and its rela-
tion with other departments.
       (d) Installation of Costing System
       (e) Relationship of Cost Accounting, Financial Accounting, Manage-
ment Accounting and Financial Management.
       (f) Cost terms and Concepts
       (g) Cost Reduction and Cost Control
       (h) Elements of Costs
       (i) Cost behavior pattern, Separating the components of fixed, vari-
able, semi-variable and step costs.
       (j) Methods of Costing, Techniques of Costing.
       (k) Cost Accounting with use of Information Technology.
(ii) **Elements of Cost and preparation of Cost Sheets**
   
   (a) Functional classification and ascertainment of cost
   
   (b) Preparation of Cost Sheets for Manufacturing sector and for Service sector

2. **Ascertainment of Cost and Cost Accounting System**

   (i) **Material Cost**
   
   (a) Procurement procedures- Store procedures and documentation in respect of receipts and issue of stock, Stock verification,
   
   (b) Valuation of material receipts,
   
   (c) Inventory control-
       - Techniques of fixing level of stocks- minimum, maximum, re-order point, safety stock, determination of optimum stock level,
       - Determination of Optimum Order quantity- Economic Order Quantity (EOQ),
       - Techniques of Inventory control- ABC Analysis, Fast, Slow moving and Non moving (FSN), High, Medium, Low (HML), Vital, Essential, Desirable (VED), Just-in-Time (JIT)- Stock taking and perpetual inventory system, use of control ratios,
   
   (d) Inventory Accounting
   
   (e) Consumption- Identification with products of cost centres, Basis for consumption entries in financial accounting, monitoring consumption.

(ii) **Employee Cost**

   (a) Attendance and Payroll procedures-
       - Elements of wages- Basic pay, Dearness Allowance, Overtime, Bonus, Holiday and leave wages, Allowances and perquisites.
   
   (b) Employee Cost Control
   
   (c) Employee Turnover- Methods of calculating employee turnover, causes of employee turnover, effects of employee turnover.
   
   (d) Utilisation of Human Resource, Direct and indirect employee Cost, charging of employee cost, Identifying employee hours with work orders or batches or capital jobs.
(e) Remuneration systems and incentive schemes-
   - Time Rate System, Piece Rate System, Differential piece rate system, Calculation of wages, Effective Wages.

(iii) Direct Expenses
   (a) Direct expenses
   (b) Nature of Direct or Chargeable expenses.
   (c) Sub-contracting- Control on material movements, Identification with the main product or service.

(iv) Overheads
   (a) Functional analysis- Factory, Administration, Selling, Distribution, Research and Development.
   (b) Behavioral analysis- Fixed, Variable and Semi- Variable.
   (c) Allocation and Apportionment of overheads using Absorption Costing Method.
   (d) Factory Overheads- Primary and secondary distribution,
   (e) Administration Overheads- Method of allocation to cost centres or products,
   (f) Selling & Distribution Overheads- Analysis and absorption of the expenses in products/ customers, impact of marketing strategies, cost effectiveness of various methods of sales promotion.
   (g) Treatment of Research and development cost in cost accounting.

(v) Concepts of Activity Based Costing (ABC)

(vi) Recording and Accounting of Costs
   (a) Non-integrated Cost Accounting system- Ledger under non-integral system
   (b) Integrated (Cost and Financial) Accounting system- Ledgers under integral system.
   (c) Difference between the Non- integrated and Integrated Accounting system.
   (d) Reconciliation of profit as per Cost and Financial Accounts (under Non-Integrated Accounting System).
3. **Methods of Costing**

   (i) **Single Output/ Unit Costing**

   (ii) **Job Costing**: Job cost cards and databases, collecting direct costs of each job, attributing overheads to jobs, Application of job costing.

   (iii) **Batch Costing**: Determination of optimum batch quantity, Ascertainment of cost for a batch, Preparation of batch cost sheet, Treatment of spoiled and defective work.

   (iv) **Contract Costing**

     (a) Ascertainment of cost of a contract, Progress payment, Retention money, Escalation clause, Cost plus contract, Value of work certified, Cost of Work not certified.

     b) Determination Value of work certified, Cost of work not certified, Notional or Estimated profit from a contact.

   (v) **Process/ Operation Costing**

     (a) Process cost recording, Process loss, Abnormal gains and losses, Equivalent units of production, Inter-process profit, Valuation of work in process.

     (b) Joint Products- Apportionment of joint costs, Methods of apportioning joint cost over joint products,

     (c) By-Products- Methods of apportioning joint costs over by-products, treatment of By-product cost.

   (vi) **Costing of Service Sectors**

     a) Determination of Costs and Prices of services of following sectors/ Industries:

        - Transport, Toll roads, Hospitals, Canteen/ Restaurants, Hotels/ Lodges, Educational Institutions, Financial Institutions/ Banks, Insurance, IT sector and other services.

4. **Cost Control and Analysis**

   (i) **Standard Costing**

     (a) Setting up of Standards, Types of Standards, Standard Costing as method of performance measurement.
(b) Calculation and Reconciliation of Cost Variances-

(ii) Marginal Costing
(a) Basic concepts of marginal costing, Contribution margin, Break-even analysis, Break-even and profit volume charts, Contribution to sales ratio, Margin of Safety, Angle of Incidence, Cost-Volume-Profit Analysis (CVP), Multi-product break-even analysis, Consideration of Limiting factor (key factor),
(b) Determination of Cost of a product/service under marginal costing method, determination of cost of finished goods, work-in-progress,
(c) Comparison of Marginal costing with absorption costing method- Reconciliation of profit under the both methods,
(d) Short term decision making using the above concepts (basic/fundamental level).

(iii) Budget and Budgetary Control
(a) Meaning of Budget, Essentials of Budget, Budget Manual, Budget setting process, Preparation of Budget and monitoring procedures.
(b) The use of budget in planning and control
(c) Flexible budget, Preparation of Functional budget for operating and non-operating functions, Cash budget, Master budget,
(d) Introduction to Principal/Key budget factor, Zero Based Budgeting (ZBB), Performance budget, Control ratios and Budget variances.
# CONTENTS

## MODULE – 1
- Chapter 1 – Introduction to Cost and Management Accounting
- Chapter 2 – Material Cost
- Chapter 3 – Employee Cost and Direct Expenses
- Chapter 4 – Overheads: Absorption Costing Method
- Chapter 5 – Activity Based Costing
- Chapter 6 – Cost Sheet
- Chapter 7 – Cost Accounting System

## MODULE – 2
- Chapter 8 – Unit & Batch Costing
- Chapter 9 – Job Costing and Contract Costing
- Chapter 10 – Process & Operation Costing
- Chapter 11 – Joint Products & By Products
- Chapter 12 – Service Costing
- Chapter 13 – Standard Costing
- Chapter 14 – Marginal Costing
- Chapter 15 – Budget and Budgetary Control

© The Institute of Chartered Accountants of India
## DETAILED CONTENTS : MODULE-1

### CHAPTER 1 – INTRODUCTION TO COST AND MANAGEMENT ACCOUNTING

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Introduction</td>
<td>1.2</td>
</tr>
<tr>
<td>1.2</td>
<td>Objectives of Cost Accounting</td>
<td>1.3</td>
</tr>
<tr>
<td>1.3</td>
<td>Scope of Cost Accounting</td>
<td>1.5</td>
</tr>
<tr>
<td>1.4</td>
<td>Relationship of Cost and Management Accounting with other related disciplines</td>
<td>1.6</td>
</tr>
<tr>
<td>1.5</td>
<td>Role &amp; Functions of Cost and Management Accounting</td>
<td>1.8</td>
</tr>
<tr>
<td>1.6</td>
<td>Users of Cost and Management Accounting</td>
<td>1.9</td>
</tr>
<tr>
<td>1.7</td>
<td>Essentials of a Good Cost Accounting System</td>
<td>1.10</td>
</tr>
<tr>
<td>1.8</td>
<td>Installation of Costing System</td>
<td>1.11</td>
</tr>
<tr>
<td>1.9</td>
<td>Cost Accounting with the use of Information Technology (IT)</td>
<td>1.12</td>
</tr>
<tr>
<td>1.10</td>
<td>Cost Objects</td>
<td>1.13</td>
</tr>
<tr>
<td>1.11</td>
<td>Responsibility Centres</td>
<td>1.15</td>
</tr>
<tr>
<td>1.12</td>
<td>Limitations of Cost Accounting</td>
<td>1.16</td>
</tr>
<tr>
<td>1.13</td>
<td>Classification of Costs</td>
<td>1.17</td>
</tr>
<tr>
<td>1.14</td>
<td>Methods of Costing</td>
<td>1.27</td>
</tr>
<tr>
<td>1.15</td>
<td>Techniques of Costing</td>
<td>1.28</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>Test Your Knowledge</td>
<td>1.31</td>
</tr>
<tr>
<td></td>
<td>Answers/ Solutions</td>
<td>1.33</td>
</tr>
</tbody>
</table>

### CHAPTER 2 – MATERIAL COST

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Introduction</td>
<td>2.2</td>
</tr>
<tr>
<td>2.2</td>
<td>Material control</td>
<td>2.3</td>
</tr>
<tr>
<td>2.3</td>
<td>Materials Procurement Procedure</td>
<td>2.5</td>
</tr>
<tr>
<td>2.4</td>
<td>Valuation of Material Receipts</td>
<td>2.10</td>
</tr>
<tr>
<td>2.5</td>
<td>Material Storage &amp; Records</td>
<td>2.14</td>
</tr>
<tr>
<td>2.6</td>
<td>Inventory Control</td>
<td>2.17</td>
</tr>
<tr>
<td>2.7</td>
<td>Material Issue Procedure</td>
<td>2.38</td>
</tr>
<tr>
<td>2.8</td>
<td>Valuation of Material Issues</td>
<td>2.40</td>
</tr>
</tbody>
</table>
CHAPTER 3 – EMPLOYEE COST AND DIRECT EXPENSES

3.1 Introduction ......................................................................................................................... 3.2
3.2 Employee (Labour) Cost ................................................................................................. 3.3
3.3 Employee (Labour) Cost Control ................................................................................ 3.4
3.4 Attendance & Payroll Procedures ............................................................................... 3.5
3.5 Idle Time ............................................................................................................................... 3.11
3.6 Overtime ............................................................................................................................... 3.13
3.7 Labour Utilisation ............................................................................................................... 3.20
3.8 Systems of Wage Payment and Incentives ..................................................................... 3.21
3.9 Absorption of Wages ....................................................................................................... 3.42
3.10 Efficiency Rating Procedures ....................................................................................... 3.45
3.11 Employee (Labour) Turnover ......................................................................................... 3.47
3.12 Direct Expenses .................................................................................................................. 3.53
    Summary .............................................................................................................................. 3.54
    Test Your Knowledge ....................................................................................................... 3.56
    Answers/ Solutions ........................................................................................................... 3.61

CHAPTER 4 – OVERHEADS: ABSORPTION COSTING METHOD

4.1 Introduction ......................................................................................................................... 4.2
4.2 Classification of Overheads ............................................................................................. 4.2
4.3 Accounting and Control of Manufacturing Overheads ................................................. 4.6
4.4 Steps for the Distribution of Overheads ......................................................................... 4.9
4.5 Methods of Absorbing Overheads to Various Products or Jobs .................................. 4.22
4.6 Types of Overhead Rates ................................................................................................. 4.28
4.7 Treatment of Under-Absorbed and Over-Absorbed Overheads in Cost Accounting .... 4.35

© The Institute of Chartered Accountants of India
CHAPTER 7 – COST ACCOUNTING SYSTEM

7.1 Introduction ........................................................................................................... 7.2
7.2 Non-Integrated Accounting System .................................................................. 7.2
7.3 Integrated (Integral) Accounting System ......................................................... 7.24
7.4 Reconciliation of Cost and Financial Accounts ............................................. 7.34
7.5 Accounting for Management Information and Cost Control ....................... 7.44
   Summary .............................................................................................................. 7.46
   Test Your Knowledge .......................................................................................... 7.47
   Answers/ Solutions .............................................................................................. 7.53

© The Institute of Chartered Accountants of India