



SCHOOL OF MANAGEMENT STUDIES
INDIRA GANDHI NATIONAL OPEN UNIVERSITY

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BCOC-138 COST ACCOUNTING

You know that accounting is an essential aspect of management. This is so because accounting contains valuable information relating to various operations of manufacturing concerns and business for providing necessary financial data for a number of decisions by management.

Financial Accounting (BCOC-131) one of the core courses in B.Com Programme about which you studied in detail, is primarily responsible for recording day-to-day transactions of the business and helps in preparing the financial statements like Profit and Loss Account and Balance Sheet. But, it does not provide detailed information about costs of various products, services, operations and processes which is considered very important for planning and controlling all business activities. This is achieved by a special branch of accounting known as 'Cost Accounting' which embraces the accounting procedures related to recording of incomes and expenses and the preparation of periodical statements and reports with the object of ascertaining and controlling costs. This course consists of 17 units. The brief details of the units are:

BASIC CONCEPTS

Unit 1: Nature and Scope of Cost Accounting, discusses the need for costing, limitations of financial accounting, difference between cost and financial accounting, advantages and also procedure of installing a costing system.

Unit 2: Cost Concepts and its Ascertainment, explains the concepts relating to the ascertainment of cost and describes various elements of cost. It also gives the proforma of cost sheet and explains various components of total cost methods and types of costing. Finally, it describes the role and responsibilities of Cost Accountant.

MATERIAL AND LABOUR

Unit 3: Procurement, Storage and Issue explains the procedure for procurement, storage, issue of materials and its control.

Unit 4: Inventory Control deals with inventory control. It explains meaning and objectives of inventory control. It describes various techniques of inventory control.

Unit 5: Pricing the Issue of Materials explains to ascertain the cost of material, various methods of pricing the issue of materials and the preparation of stores ledger account.

Unit 6: Labour – Basic Concepts deals with labour and explains the methods of time keeping, time booking, payroll accounting, causes and control of idle time and labour turnover.

Unit 7: Accounting for Labour explain various methods of wage payment and incentive plans along with accounting procedure.

OVERHEADS

Unit 8: Classification and Distribution of Overheads deals with

classification of overheads and discusses the first three stages of distribution of production (factory) overhead viz., collection, allocation and apportionment.

Unit 9: Absorption of Factory Overheads discusses various methods of absorption of factory overheads, the last stage of distribution.

Unit 10: Machine Hour Rate explains the computation of machine hour rate.

Unit 11: Treatment of Other Overheads and Activity Based Cost Allocation deals with the distribution of administration and selling and distribution overheads. Explains the treatment of certain peculiar items of overheads in cost accounts and briefly discusses the concept of activity based cost allocation.

METHODS OF COSTING

Unit 12 : Unit Costing deals with unit costing which is used for ascertaining the cost and profit of a product by preparing a cost sheet.

Unit 13: Job Costing deals with job costing. It explains the technique of estimating the cost of a job.

Unit 14: Contract Costing deals with Contract Costing. It explains the method of ascertaining the profit on uncompleted contracts.

Unit 15: Process Costing discusses the method of process costing. It explains how cost of output is ascertained for each process and how normal and abnormal process losses are treated in cost accounts.

Unit 16: Joint Products and By-Products explain the accounting treatment of joint products and by-products. It discusses the procedure for valuation of work in progress.

Unit 17: Valuation of Work-in-Progress explains the procedure for valuation of work-in-Progress.

Unit 18: Service Costing explains the need of Service Costing and computation of Service Costing pertaining to transport services only.

Unit 19: Reconciliation of Cost and Financial Accounts covers the reconciliation of cost and financial accounts. It discusses the need and the methods of reconciliation of profits shown by cost accounts with profits shown by financial accounts.



UNIT 1 NATURE AND SCOPE OF COST ACCOUNTING

Structure

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Need for Costing
 - 1.2.1 Limitations of Financial Accounting
 - 1.2.2 Costing and the Economy
- 1.3 Definitions of Costing and Cost Accounting
- 1.4 Objects of Cost Accounting
- 1.5 Difference between Cost Accounting and Financial Accounting
- 1.6 Advantages of Cost Accounting
- 1.7 Installation of a Costing System
 - 1.7.1 Possible Difficulties
 - 1.7.2 Factors to be Considered
 - 1.7.3 Success of the Costing System
- 1.8 Let Us Sum Up
- 1.9 Key Words
- 1.10 Answers to Check Your Progress
- 1.11 Terminal Questions

1.0 OBJECTIVES

After studying this unit, you should be able to:

- describe the need for costing in modern economy,
- define ‘costing’ and ‘cost accounting’,
- specify the objects of costing,
- differentiate between cost accounting and financial accounting,
- explain the importance of costing, and
- state the major considerations in the installation of a costing system.

1.1 INTRODUCTION

You know that Cost Accounting is a specialised branch of accounting. It is concerned with classifying, recording and appropriate allocation of expenditure for the determination of costs of products and services and the ascertainment of the profitability. It also embraces the preparation of periodical statements and reports for purposes of controlling costs and managerial decision-making. In this unit, we shall introduce you to the nature and scope of cost accounting and discuss in detail the need for cost accounting, its definition and objects, the difference between cost accounting and financial accounting, the advantages of cost accounting, and the installation of a costing system in an organisation.

1.2 NEED FOR COSTING

Every economic activity, particularly an activity involved in the production of goods or in rendering service, involves some expenditure. The expenditure

may be in terms of materials, labour and other direct or indirect expenses. The major purpose of such activities in a business enterprise is to earn profit. It is, therefore, necessary that all the three elements of the transaction (i.e. cost, profit and price), are clearly identified. For example, a shoe factory launches a new sport shoe. It has to incur Rs. 20 for material, Rs. 30 for labour and Rs. 25 for other expenses (overheads) on every pair of shoes produced by the factory and supplied in the market. The factory has fixed the selling price of the shoes at Rs. 100 per pair. Thus, the cost of a pair of shoes is Rs. 75 (20 + 30 + 25) its selling price is Rs. 100, and the profit per pair is Rs. 25 (100 - 75). The management requires such information in respect of each product manufactured and each activity undertaken by the organisation for purposes of planning, cost control and decision-making. But, the records maintained under financial accounting fail to provide the necessary information. Hence, the accountants developed a new system of accounting called 'cost accounting' under which records of transactions are maintained in such a manner that detailed cost information is readily available in respect of each product, job, department, process, etc. **In fact, various deficiencies and limitations of financial accounting gave rise to the need for cost accounting.**

1.2.1 Limitations of Financial Accounting

- 1) It does not provide detailed operating information for each department, process, product, or other unit of activity within the organisation. It simply provides information in terms of income, expenses, assets and liabilities for the enterprise as a whole.
- 2) It does not classify expenses into direct and indirect or fixed and variable. The costs are not assigned to the products at each stage of production so as to reveal controllable and uncontrollable items.
- 3) It does not set up a proper system of control over the main elements of cost viz., materials and labour. Hence, the wastages and losses of materials go unchecked and utilisation of labour time remains uncontrolled.
- 4) It does not establish standards or norms against which different cost items can be compared.
- 5) It does not provide adequate costing information for fixation of selling price of various products manufactured or services provided by the organisation.
- 6) It contains historical cost information which is compiled at the end of the accounting period. Hence, it becomes difficult to compile cost data at frequent intervals.
- 7) Since product-wise cost and profit information is not available from financial accounts, the analysis of causes for profit or loss cannot be effectively done. Financial accounts are at best like a thermometer which can only indicate the temperature of the body but cannot help diagnosis or cause analysis of its health.

1.2.2 Costing and the Economy

Let us now analyse the need for costing in a relatively wider perspective. Modern economy has a few characteristic features which further establish the necessity of costing. These can be summarised as follows:

- 1) **Global Competition** :There is an ever increasing amount of competition in the market both internally and externally. Only those

producers can meet the challenge who exercise stringent control over costs and follow sound pricing policies.

- 2) **Limited Resources:** There has been an acute scarcity of resources which require an effective and economic utilisation by curtailing wastages and losses.
- 3) **Complex Management:** The management of industrial organisations has become an extremely complex process demanding attention and action at every stage of operation and in every area of production.
- 4) **Fast Decisions:** Correct and quick decisions are required on the basis of adequate information supported by reliable data.
- 5) **Special Responsibility:** Every business shares a heavy social responsibility in terms of proper quality, reasonable prices, regular supply, etc.
- 6) **Optimum Profit:** All business ventures aim at maximisation of profit which is mainly based on an efficient performance in financial, personnel, production and marketing activities.

If we correlate the above factors, costing appears to be the only underlying link between different factors and the only unifying force behind business success. Costing aids pricing, checking of wastage, control of resources, management of processes, flow of data for decisions, discharge of social obligations and provides an opportunity for profit growth in the organisation. A large number of industrial establishments, therefore, have been showing an increasing confidence and reliance in the system of costing and have been applying it to the management of their different economic assignments.

1.3 DEFINITIONS OF COSTING AND COST ACCOUNTING

The term 'Costing' refers to the technique and process of ascertaining costs. It consists of principles and rules which are applied for ascertaining the cost of products manufactured and services rendered. The term 'Cost accounting' refers to the process of accounting for costs. It begins with the recording of all incomes and expenditures and ends with the preparation of periodical statements and reports for ascertaining and controlling costs. Thus, cost accounting is more comprehensive a term which includes costing.

In actual practice, however, these two terms are used interchangeably. Wheldon, after expanding the ideas contained in the definitions of 'Costing' and 'Cost Accounting' has given an exhausting definition of Costing which reads as follows:

Costing is the classifying, recording and appropriate allocation of expenditure for the determination of the costs of products or services; and for the presentation suitably of arranged data for purposes of control and guidance of management.

At initial stages of the development of cost accounting, the Terminology published by the Institute of Cost and Management Accounts (ICMA) of U.K. even distinguished between 'cost accounting' and 'cost accountancy' and defined the latter as "the application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability as well as the presentation of information for the purpose of managerial decision-making." But, now-a-days the term, 'Cost Accountancy' is not used at all. Most of the authors use the term "Cost Accounting" and do not even recommend the use of 'Costing'

Basic Concepts

According to the latest Terminology published by the Institute of Cost and Management Accountants, “Cost accounting is that part of management accounting which establishes budgets and standard costs and actual costs of operations, processes, departments or products and the analysis of variances, profitability or social use of funds.” Thus, we can say that,

- a) Cost accounting is a process of accounting for costs.
- b) It incorporates incomes and expenditures relating to the production of goods or services.
- c) It provides statistical data on the basis of which future estimates may be prepared.
- d) It serves as a basis of ascertainment and control of costs of products and services.
- e) It involves the functions of (i) analysis, (ii) recording, (iii) establishment of budgets and standards, (iv) comparison, and (v) reporting.

Check Your Progress A

- 1) What is Costing?
- 2) Define Cost Accounting?
- 3) Give four examples of expenses which constitute cost in a ready-made garments factory.
- 4) State whether each of the following statements is **True** or **False** and justify your answer.
 - i) Cost Accounting gets its basic data for estimates from the financial accounting system.
 - ii) Cost Control means a lower amount of profit to the company.
 - iii) Customers get more satisfaction when they buy goods at reasonable prices.
 - iv) If resources are scarce, cost of production will be low.
 - v) Cost Accounting is a comprehensive term which includes costing.
 - vi) Cost Accounting provides data for managerial decision-making.

1.4 OBJECTS OF COST ACCOUNTING

The main objects of cost accounting are as follows:

- 1) To ascertain the cost of products and services;
- 2) To aid in fixation of selling price or quotation for tenders;
- 3) To analyse and classify the different elements of cost which constitute the total cost;
- 4) To identify causes of wastage and apply appropriate course of action for checking the wastage;
- 5) To control costs by analysis and comparisons;
- 6) To communicate to the management all information relating to costs and facilitate managerial decision-making;

- 7) To judge the relative efficiency of different departments, branches, products, units, plants and machinery and devise means of increasing their productivity; and
- 8) To produce cost statements as and when required by the management for an interim review of production, sales and profit or to plan future activities.

Thus, the objects of costing establish the fact that it is an essential branch of accounting. It is the key to economy in cost of production and is an essential technique of ensuring efficiency in management.

1.5 DIFFERENCE BETWEEN COST ACCOUNTING AND FINANCIAL ACCOUNTING

The difference between Cost Accounting and Financial Accounting is as follows:

Cost Accounting		Financial Accounting
1)	Ascertains the cost of goods or services:	Presents the operational results and financial position of the business.
2)	Serves the information needs of the management.	Provides financial information about the company to its shareholders, creditors, employees and the society at large.
3)	Need not be followed by a system of external audit .	Needs a system of independent audit to ensure that the financial statements give a true and fair view of the state of affairs.
4)	Classifies expenses into material cost, labour cost, fixed overheads and variable overheads .	Transactions relating to all receipts and payments of the business are classified into debit and credit entries.
5)	Shows expenses in a cost sheet , process account, contract account or some other statement of account.	Consolidates all transactions into two financial statements i.e., Trading and Profit & Loss Account and Balance Sheet .
6)	Does not form a basis for tax assessment because this is not a record.	Acts as a basis for determination of tax liabilities of the business.
7)	Requires variance analysis to identify the favourable or adverse differences between the standard cost and actual Cost.	Records only the actual transactions occurring in course of business operations.
8)	Presents the cost information at frequent intervals.	Presents financial information once or twice a year.
9)	Finds out the profit or loss on specific products, branches, departments, jobs, or processes.	Gives the operational results of the entire business.

10)	Maximises future efficiency of operations with the help of cost data, used to exercise control and check wastage.	Uses accounting ratios to compute the major trends which have already taken place in the previous, accounting period.
11)	Accounts also for physical units such as labour hour, machine hour, etc.	Follows only monetary units for recording transactions in the books of account.

Common Goal: Despite the differences of purpose and approach between Cost Accounting and Financial Accounting, both the systems have a common goal of continuously assisting the organisation they serve. In fact, the two are complementary to each other. In a developing enterprise, therefore, both the systems operate to the advantage of the organisation and contribute to the smooth running of the business.

1.6 ADVANTAGES OF COST ACCOUNTING

Having learnt the need for costing, its meaning and objects, and the difference between Cost Accounting and Financial Accounting, it should not be difficult for you to list the advantages of Cost Accounting and appreciate it as an invaluable aid to management.

An effective and organised system of costing helps:

- 1) Continuous flow of information regarding production, cost, materials, labour, stores, plant capacity, etc., which assist output planning.
- 2) Identification of unproductive activities, losses or wastage of resources, obsolete machinery and points of inefficiency which demand a quick remedial action.
- 3) Compilation of correct and reliable cost data.
- 4) Preparation of budgets and business forecasts.
- 5) Measurement of efficiency of operations through establishment of standards and analysis of variances.
- 6) Fixation of selling prices.
- 7) Cost comparisons between different periods, products, departments or firms.
- 8) Estimates of costs and revenue in advance.
- 9) Inventory control and periodical stock-taking.
- 10) Identification of idle capacity and the cost of working below the installed capacity.
- 11) Ascertainment of cost and profit more frequently and examination of their causes in detail.
- 12) Decisions on the basis of facts and figures and formulation of suitable policies for various matters such as:
 - i) level of output
 - ii) make or buy decision
 - iii) replacement or modernisation of old equipment
 - iv) shut down or continue during depression
 - v) introduction of new products or elimination of old ones

- vi) acceptance of a special order
- vii) replacement of labour with machinery

Because of the above advantages of cost accounting, its use is no more restricted to manufacturing establishments. Now-a-days, costing is used by various institutions—such as hospitals, transport undertakings, local authorities, offices, banks, educational institutions, etc.

Besides, costing is of considerable advantage to the consumers. They get products at reasonable prices due to proper costing system. To the employees of the organization, costing is beneficial in granting incentives to good work, bonus and higher wages. Costing helps the investors, bankers, lenders and shareholders in evaluating the past profitability and future prospects of the company. It ultimately benefits the economic development of the country as a whole because of efficiency in industrial operations, effective mobilisation of resources, balanced utilisation of funds and timely achievement of targets.

Check Your Progress B

- 1) Give **four** main objects of costing.
- 2) State **four** major differences between Cost Accounting and Financial Accounting.
- 3) Select and tick the most appropriate alternative to fill in the blanks.
 - i) Cost Accounting canthe future cost of production
 - a) ascertain; b) forecast; c) analyse; d) estimate.
 - ii) Cost Accounting gives information to the management for the purpose of
 - a) employees' welfare; b) decisions;
 - c) efficiency; d) profitability.
 - iii) Cost statements form part of theaccounts of a company.
 - a) published; b) statutory; c) internal; d) taxation.
 - iv) Costing is based onfigures.
 - a) estimated; b) actual; c) accurate; d) projected.
 - v) Costing records must also beby management.
 - a) audited; b) prepared; c) verified; d) analysed .
4. List the major advantages of the Cost Accounting.

1.7 INSTALLATION OF A COSTING SYSTEM

In view of the growing size and variety of organizations, a single system of costing cannot suit every business. The principles and procedures of costing, therefore, have to be applied in each organisation according to its own characteristics and environment. In other words, it is only a properly designed system of costing suitable to the organisation which can help its successful operation.

Before introducing a system of costing, it would be advisable to conduct a preliminary investigation to assess the exact requirements of the business in respect of: (a) product, (b) organisation, (c) manufacturing process, and (d) selling and distribution methods. Moreover, it should ensure that,

Basic Concepts

- i) the existing organisation is disturbed to the minimum;
- ii) the system is implemented gradually;
- iii) the process of costing designed for the organisation is compact and goes into meaningful details only;
- iv) the procedure is simple and economical to operate; and
- v) the system is able to generate periodical reports to various levels of management.

The two other aspects which need a proper assessment before the installation of a system of costing are:

- 1) What are the major objectives of costing in the business? For example, whether it is being introduced for fixing the prices or for instituting a system of cost control, or for both.
- 2) What are the practical difficulties in the process of introduction of the system?

1.7.1 Possible Difficulties

We must be conscious of the difficulties in introducing the system of costing and that they have to be overcome. These difficulties usually are:

- 1) Inadequate support from top management and opposition to the system by some officers.
- 2) Resistance from staff associated with the operation of the financial accounting system.
- 3) Resentment at other levels in view of the additional work expected due to the costing system.
- 4) Shortage of trained and qualified staff to handle the new system.
- 5) Heavy costs involved in the process of installation.

1.7.2 Factors to be Considered

The following factors should be considered before the installation of a system of costing:

- 1) Objective of the costing system.
- 2) Nature of the business.
- 3) Quality of the management.
- 4) Size and type of organisation, scope of authority, sources of information and reports to be submitted.
- 5) Technical aspect of the business.
- 6) Attitude and behaviour of the staff in extending co-operation to the system and the organization.
- 7) Impact of different operations on variable expenses.
- 8) Manner of reconciliation between cost and financial accounts and the possibilities of developing them into an integrated system of accounting through control accounts.
- 9) Quantum of information needs and the process of collecting the data without much labour.
- 10) Nature of the product and the type of costing system which will suit the product.

- 11) Extent to which the importance of the system can be appreciated by the supporting staff and an awareness created among them about the relevance of regular data collection.

1.7.3 Success of the Costing System

The requisites of an effective system of costing are as follows:

- 1) It suits the nature and requirements of the business.
- 2) It is simple and easy to operate. For this purpose, standard forms should be used and the objective of every record and report should be clear to all concerned.
- 3) It receives full cooperation of the staff.
- 4) It ensures promptness and regularity in flow of required information for the preparation and presentation of costing reports.
- 5) It is closely linked with the financial accounting system and makes it easier to reconcile the results obtained by cost accounts and financial accounts.
- 6) It contributes to cost control effectively.
- 7) It provides for comparison of estimates with the actual results.
- 8) There is considerable amount of flexibility in the system so that it can easily adjust with the changing conditions or requirements of the business.
- 9) The cost of installation and operation of the costing system is justified by the benefits derived from the system.

Thus, the system of costing proposed to be installed in an organisation must be properly planned and introduced carefully so that it is competent enough to deliver the desired results. Much depends upon the manner in which the system operates so as to derive its best advantage.

Check Your Progress C

- 1) State **four** major factors which you will take into account for installation of a costing system in an organisation.
- 2) State the possible difficulties faced in introducing a costing system in an organisation.
- 3) Answer **YES** or **NO** in case of the following statements and justify your answer.
 - i) Costing produces information which may also be useful to the competitors of the business.
 - ii) Wastage of labour need not be checked in an effective system of costing.
 - iii) Cost records can assist verification of results shown by the financial accounts.
 - iv) There is a standard system of costing which suits all types of organisations.
 - v) The cost of the costing system should be justified by the benefits derived from the system.
 - vi) The costing system should be independent of the financial accounting system.

1.8 LET US SUM UP

Costing is a specialised branch of accounting which is responsible for the ascertainment and control of costs of goods produced and the services provided by the business. Its need arose because of the limitations of the financial accounting and the complexities of managing a modern enterprise.

Cost Accounting refers to the principles, methods and techniques used for the Nature and Scope ascertainment and control of costs as well as the presentation of information for managerial decision-making. Its main objects are (i) ascertainment of costs, (ii) fixation of prices, (iii) control of costs, and (iv) providing cost data for managerial use. Cost Accounting differs from Financial Accounting in respects of (i) the interests it serves, (ii) the objectives to be achieved, (iii) analysis of cost and profit, (iv) mode of presenting information, and (v) the periodicity of reporting. For installation of a costing system in any organisation, it must be ensured that (i) it suits the nature of the business, (ii) it is simple to understand and easy to operate, (iii) it is introduced gradually, (iv) it provides the necessary information promptly and regularly, (v) it is economical, and (vi) it is flexible.

1.9 KEY WORDS

Allocation: Distribution of expenditure among various cost centres.

Budget: An estimate of allocations in respect of expenditure and/or revenue during a given future period.

Costing: The technique and process of ascertaining costs.

Cost Sheet: A statement showing different elements of cost relating to a particular product or a job for a particular period.

Cost Centre: A location, person, equipment or department for which costs may be ascertained and used for purposes of control.

Direct Expenses : Expenses incurred in connection with material, labour, etc. which can be directly identified with items produced.

Fixed Expenses: Expenses which do not increase or decrease with a change in volume of output.

Idle Capacity: Unutilised production capacity of an enterprise.

Installed Capacity: Total production capacity of an enterprise.

Indirect Expenses: Overheads relating to manufacturing, administration, distribution or selling which cannot be directly identified with items produced and so have to be allocated on some rational basis.

Overheads: All types of indirect expenses.

Quotation: Minimum acceptable price offered for the supply of goods or services.

Reconciliation : Matching two results by locating the causes of difference and making them agree through appropriate adjustments.

Standard: Pre-determined level of performance or cost based on previous experience and a realistic assessment of the present situation.

Unit Cost: Total cost divided by the output quantity.

Variance: Difference between standard cost and actual cost.

Variable Expenses: Expenses which increase or decrease in the same proportion as the increase or decrease in the output.

1.10 ANSWERS TO CHECK YOUR PROGRESS

- A) 3. (a) Wages (b) cloth (c) Buttons (d) Package
4. (i) True (ii) False (iii) True (iv) False
(v) True (vi) True
- B) 1. (a) Cost ascertainment (b) Cost control (c) Fixation of prices
(d) Providing data for management decisions
3. (i) d (ii) b (iii) c (iv) a (v) c
- C) 3. (i) No (ii) No (iii) Yes (iv) No (v) Yes (vi) No

1.11 TERMINAL QUESTIONS

- 1) Why do we need an effective system of cost accounting in a business enterprise?
- 2) Define 'Cost Accounting'. State its main objects.
- 3) State the importance of costing in a modern economy.
- 4) Differentiate between Cost Accounting and Financial Accounting.
- 5) What are the major advantages of Cost Accounting to a manufacturing concern?
- 6) How can you install a system of costing in a biscuit producing factory? What are the possible difficulties in installing such system?
- 7) "Financial Accounting procedures are generally designed to ascertain the periodic profit or loss, but there are important limitations and deficiencies in the system." Discuss.
- 8) How do Cost Accounting records help in the planning and control of business operations of an enterprise?

Note: These questions will help you to understand the unit better. Try to write answers for them and verify with the content. But do not submit your answers to the University. These are for your practice only.

SOME USEFUL BOOKS

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UNIT 2 COST CONCEPTS AND ITS ASCERTAINMENT

Structure

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- 2.1 Introduction
- 2.2 Meaning of Cost
- 2.3 Classification of Costs
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 - 2.3.2 On the Basis of Identifiability with Products
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2.0 OBJECTIVES

After studying this unit, you should be able to:

- define the term cost,
- explain the concepts of cost unit and cost centre,
- classify costs,
- describe the elements of cost,
- give a proforma of cost sheet and identify the components of total cost, and
- describe different methods of costing and identify the industries to which each method is applicable.

2.1 INTRODUCTION

In Unit 1 you have learnt about the nature and scope of costing, the difference between Cost Accounting and Financial Accounting, and the advantages of installing a costing system in an organisation. You learnt that costing is

the technique and process of ascertaining cost. In order to understand this process, one must gain familiarity with certain concepts like cost, cost unit, cost centre, classification of costs, elements of cost and components of total cost. This unit mainly covers these aspects and gives a proforma of cost sheet prepared for ascertaining cost and profit of each product manufactured by an organisation during a particular period. This unit also discusses various methods of costing and identifies the industries for which each method is considered suitable.

2.2 MEANING OF COST

Cost means the amount of expenditure: (actual or notional) incurred on, or attributable to, a given thing. In other words, cost indicates: (i) an actual or estimated expenditure, (ii) a direct or indirect expenditure, and (iii) it is related to a job, process, product or service. Examples of expenses which constitute cost are:

(a) materials, (b) labour, (c) factory overheads, (d) administrative overheads, and (e) selling and distribution overheads.

Cost is a wide concept. It does not give an exact meaning unless it is properly qualified. It is necessary, therefore, that both who ascertain cost and who use it as a base for certain decisions, interpret the meaning and contents of cost in a similar manner. The main characteristics of cost are:

- 1) The term 'cost' is not complete unless it is fully identified with its nature and category.
- 2) Costs do not represent the same contents under every situation.
- 3) No cost is true, exact or accurate. It is a flexible concept; it does not mean the same thing under all circumstances.
- 4) Cost may be ascertained in different ways by different persons.
- 5) Costs vary with time, volume, firm, method or purpose.

Thus, cost has no fixed, certain or definite meaning. This may change according to its interpretation and the manner in which, or the purpose for which, it is ascertained. Cost must indicate its purpose and the conditions under which it is computed. If not, it may be vague, giving different meaning to different people. Hence, it must be related to a particular activity or commodity and expressed for a given quantity or unit of goods produced or services performed.

Cost and Loss: You should be able to distinguish between the terms 'cost' and 'loss'. Cost actually signifies an expenditure incurred for securing some benefit to the business. If no benefit is derived from a particular expenditure, it is regarded as a loss. Cost of materials destroyed by fire or salary paid to a foreman during the period of strike are not regarded as cost. These are examples of loss to the business.

2.3 CLASSIFICATION OF COSTS

We often come across a wide variety of costs. Unless we are fully familiar with their meaning and utility, we may not be effective in their computation, analysis comparison and control.

There are various bases according to which costs have been classified. These are: (1) according to functions to which they relate, (2) according to their identifiability with jobs, products, or services, (3) according to their variability with changes in output, (4) according to their association with

product or period, (5) according to their controllability, and (6) according to their relevance to decision making. The first three bases are considered important at the introductory stage and, therefore, have been discussed here in detail.

2.3.1 Functional Classification

The most common classification of costs in a manufacturing establishment is on the basis of functions to which they relate because costs have to be ascertained for each of these functions. On this basis, costs are classified into four categories: (i) manufacturing costs (production costs), (ii) administrative costs, (iii) selling costs, and (iv) distribution costs.

Manufacturing Costs: Manufacturing costs refer to all expenditure incurred in the course of production from acquisition of materials to primary packing (packaging) of the finished product. It includes cost of materials, cost of labour, other direct expenses and factory overheads. These are also termed as 'production costs'.

Administrative Costs: Administrative costs include all costs that are incurred for general administration of the organisation and for the operational control. Some examples of such costs are salaries of the office staff, rent of the office building, depreciation and repairs of the office furniture, etc. In fact, any expenditure which is not related directly to production, selling, distribution, research or development forms part of the administrative costs.

Selling Costs: Selling costs are those costs which are incurred in connection with the sale of goods. Some examples of such costs are: cost of warehousing, advertising, salesmen salaries, etc.

Distribution Costs: Distribution costs are those costs which are incurred on despatch of the finished products to customer including transportation. Some examples of such Ascertainment costs are : packing, carriage, insurance, freight outwards, etc.

2.3.2 On the Basis of Identifiability with Products

On this basis costs are divided into (i) direct costs, and (ii) indirect costs.

Direct Costs: Direct costs refer to expenses which can be directly identified with a product, job or process. For example, in case of materials used and labour employed, we can easily ascertain as to which product or job or process they relate. The same thing is not true of expenditure like rent of the building which is a common cost for various products manufactured in the factory and will have to be allocated to all products on some rational basis.

Indirect Costs: Indirect costs refer to those expenses which cannot be easily identified with a particular product, job or process. These are of a general, common or collective nature which are to be allocated to various products manufactured in the factory. Some examples of such costs are: rent of the factory building, salary of the production manager, wages paid to chowkidar, etc. These costs have to be apportioned among different products on some rational basis. These are known as 'overheads' or 'on costs and can be subdivided into factory overheads, administrative overheads, selling and distribution overheads.

2.3.3 On the Basis of Variability

On this basis costs are classified into (i) fixed costs, (ii) variable costs, and (iii) semi-variable (or semi-fixed) costs.

Fixed Costs: Costs which remain unaffected by changes in volume of output are termed as 'fixed costs'. For example, whether we produce 10,000 units or 15,000 units of a particular product during a particular period, the rent of the factory building or salary of the production manager will remain the

same. Hence, the rent or salary is regarded as fixed cost. It should, however, be noted that fixed costs do not remain fixed for all times to come. They remain fixed only upto a certain level of production capacity. If there is a change in the production capacity which require additional building and equipment, such costs will also increase.

Variable Costs: Costs which increase or decrease in direct proportion to changes in the volume of output are termed as 'variable costs'. For example, for 10,000 units of output, cost of materials consumed comes to Rs. 1,50,000. If the production is increased to 12,000 units (increase of 20%) the cost of materials will increase to Rs.1,80,000 (increase of 20%). It should be noted that the cost of material per unit of output has not changed. It remains the same i.e., Rs. 15 per unit. But, it is the total cost of materials which changes because of the change in the volume of output.

Semi-Variable Costs: Costs which increase or decrease with a change in volume of output but not in the same proportion as the change in the volume of output are termed as '**semi-variable costs**'. In other words, these costs are partly variable and partly fixed and, as such, are also known as 'semi-fixed costs'. Depreciation and repairs of machinery are the best examples of such costs. Depreciation on machinery is caused partly by passage of time and partly by its usage. Hence, when production is increased the amount of depreciation also increases, but not in the same proportion as the increase in the volume of output. Take another example. If the quantity of goods sold increases, the remuneration of salesman may also increase. But, such increase will not be in direct proportion to the increase in sales because his commission on sales will increase while his salary remains the same.

The classification of costs into fixed, variable and semi-variable is very helpful in estimating the total cost at various levels of activity and also in various managerial decisions.

Check Your Progress A

- 1) What do you mean by the term 'cost'.
- 2) Distinguish between 'cost' and 'loss'.
- 3) Give three examples of semi-variable costs.
- 4) Distinguish between direct costs and indirect costs.
- 5) State whether the following statements are **True** or **False** and justify your answer.
 - i) Costs may be ascertained in different ways by different persons.
 - ii) The term 'cost' has a fixed, certain and definite meaning.
 - iii) Rent of a factory building is a variable cost.
 - iv) Salesmen salary is a fixed cost.
 - v) All factory expenses can be identified directly with the products manufactured by a factory.
 - vi) Bad debts are selling costs.

2.4 COST UNIT

You know one of the main functions of costing is to ascertain cost per unit of output. This means that each economic activity has to be measured in identifiable units which may serve as the basis of costing. Such units for the purpose of costing may be as follows:

- 1) unit of product (e.g., cost per book)

Basic Concepts

- 2) unit of time (e.g., cost of generating electricity per hour)
- 3) unit of weight (e.g., cost per kilogram of biscuits)
- 4) unit of measurement (e.g., cost per metre of cloth or per square foot of construction),
- 5) operating unit of service (e.g., cost of running a bus per kilometer).

Thus, a **cost unit is a unit of product, service or time in terms of which costs are ascertained or expressed.** Cost unit will normally be the quantity of a product for which price is quoted to the customers.

Selection of a cost unit, however, must be appropriate. Firstly, it should offer convenience in cost ascertainment. Secondly, it should be easier to associate expenses with cost units. Thirdly, it should be according to the nature and practice of the business.

Some examples of cost unit for different products and services are given below:

Product/Activity	Cost Unit
Wire	per metre
Power	per kilowatt hour
Telephone	per call
Iron	per tonne/quintal
Transport	per passenger per kilometer/ per kilogram per kilometer
Bricks	per thousand
Cement	per bag/per tonne
Paper	per ream/per kilogram
Computer	per hour
Printing	per thousand impressions
Cars	per car
Petrol	per litre
Television	per set
Pencils	per dozen
Gold	per gramme
Ship-building	per ship
Nursing Home	per bed per day

2.5 COST CENTRE

A Cost Centre is a location, person or item of equipment (or group of these) for which costs may be ascertained and used for the purposes of cost control. In other words, a cost centre may consist of either or a combination of the following:

- LOCATION** : Factory, Office, Warehouse, Stores, Sales Depot, etc.
PERSON : Foreman, Salesman, Customer, etc.
EQUIPMENT : Machine, Car, Truck, Crane, etc.

In fact, the entire organisation may be divided into specified cost centres which jointly contribute to the total cost. Identification of cost centres helps us in

- 1) ascertaining the centre-wise costs,
- 2) comparing the centre-wise costs periodically,

- 3) finding out the major trends of variance, and
- 4) applying the techniques of control to check undue, undesirable or unexpected movements in costs.

A cost, centre is a convenient unit of the organisation. It segregates operations, demarcates activities, and distributes expenses. This helps in fixing responsibilities for every cost centre.

Types of Cost Centres: Cost centres may be divided into the following four types:

- 1) Prices Cost Centre (based on sequence of operations)
- 2) Production Cost Centre (for regular production in a factory)
- 3) Operation Cost Centre (where various operations are involved in the production process)
- 4) Service Cost Centre (for activities supporting the main production)

Thus, identification or selection of cost centres depends on the nature and type of industry.

Check Your Progress B

- 1) Match the cost unit appropriate to the activity/product.

i) Transport	a) per sq. centimeter
ii) House Construction	b) per job
iii) Furniture	c) per contract
iv) Advertising	d) per piece
v) Nursing Home	e) per ton kilometer
vi) Ice Cream	f) per bed per day
vii) Shirt	g) per kilogram
- 2) Define Cost Unit.
- 3) What do you mean by Cost Centre?
- 4) State the objectives of identifying cost centres.

2.6 ELEMENTS OF COST

There are three main elements of cost : (1) materials, (2) labour, and (3) expenses.

2.6.1 Materials

The term 'materials' refers to those commodities which are used as raw materials components, or consumables for manufacturing a product. Materials can be direct o indirect.

Direct Materials: All materials used as raw-materials or components for a finished product are known as 'direct materials'. Sugarcane for sugar, cloth for ready-made garments, tyres for car are some examples of direct materials. Packaging is also an item of direct materials cost.

Indirect Materials: Consumables like lubricating oil, stationery, spare parts for machinery are termed as indirect materials. Such commodities do not form part of the finished product.

2.6.2 Labour

The workers employed of converting material into finished product or for doing various odd jobs in the business are known as 'labour'. Labour can also be direct or indirect.

Direct Labour : The workers who are directly involved in the production of goods are known as ‘direct labour’. They may be labourers producing manually or workers operating machinery. The wages paid to such workers are known as ‘direct wages’ or ‘manufacturing wages’.

Indirect Labour: The workers employed for carrying out tasks incidental to production of goods or those engaged for office work and selling and distribution activities are known as ‘indirect labour’. The wages paid to such workers are known as ‘indirect wages’.

2.6.3 Expenses

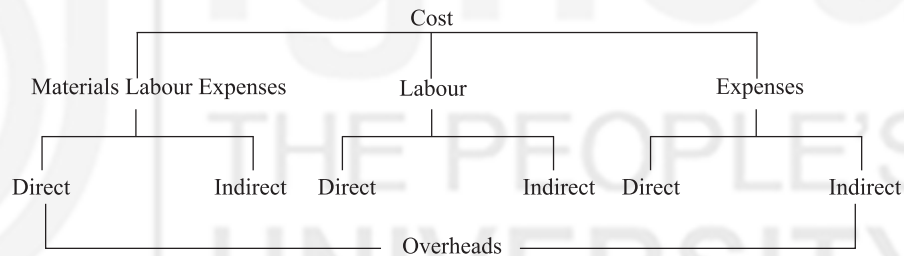
All expenditure other than material and labour are termed as ‘expenses’. Expenses can also be direct and indirect.

Direct Expenses : Other expenses which are incurred specifically for a particular product, job or service are termed as ‘direct expenses’. Some examples of such expenses are : carriage inwards, production royalty, hire charges of special equipment, cost of special drawings, etc. These are also known as ‘chargeable expenses’.

Indirect Expenses : All expenses other than indirect materials and labour which cannot be directly attributed to a particular product, job, or service are termed as ‘indirect expenses’. Rent of building, repairs of machinery, lighting and heating, insurance are some examples of indirect expenses.

The various elements of cost have been presented in the form of a chart in Figure 2. 1.

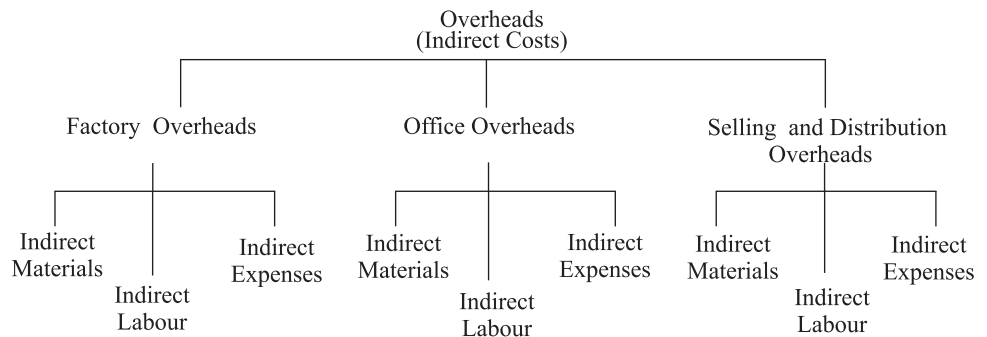
Figure 2.1 : Elements of Cost



Concept of Overheads : All material, labour and expenses which cannot be identified as direct costs are termed as ‘indirect costs’. The three elements of indirect costs viz. indirect materials, indirect labour and indirect expenses are collectively known as ‘Overheads’ or ‘On costs’.

Overheads are grouped into three categories : (1) factory (or manufacturing) overheads, (2) office (or administrative) overheads, and (3) selling and distribution overheads as shown in Figure 2.2.

Figure 2.2 : Categories of Overheads



Conversion Cost: The cost of converting raw materials into finished goods is termed as ‘conversion cost’. This includes direct wages, direct expenses and factory overheads.

2.7 COMPONENTS OF TOTAL COST

Total cost of a product is the combination of direct costs (also known as prime cost) and indirect costs (also known as overheads).

Thus, the two main components of total cost are: (1) Prime Cost, and (2) Overheads. The prime cost which represents all direct costs, therefore, consists of direct materials, direct labour and other direct expenses. Overheads, on the other hand, consists of factory overheads, office overheads, and selling and distribution overheads.

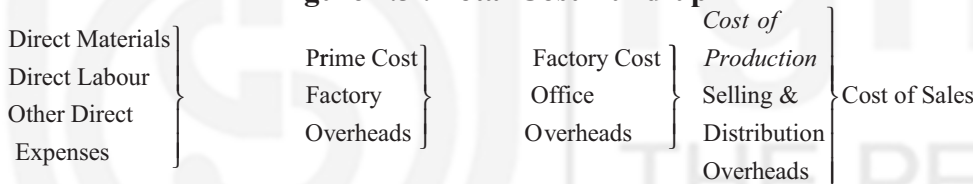
Total Cost Build Up

If we add various costs step by step, we get the following framework of total cost build-up.

- 1) Direct Material + Direct Labour + Other Direct Expenses = PRIME COST
- 2) Prime Cost + Factory Overheads = WORKS COST
- 3) Works Cost + Office and Administrative Overheads = COST OF PRODUCTION
- 4) Cost of Production + Selling and Distribution Overheads TOTAL COST or COST OF SALES

The above framework of total cost build-up is shown in Figure 2.3.

Figure 2.3 : Total Cost Build-up



Thus, we get the following components of total cost:

- 1) Prime Cost (also known as Direct Cost or First Cost)
- 2) Works Cost (also known as Factory Cost)
- 3) Cost of Production (also known as Office Cost)
- 4) Cost of Sales

Check Your Progress C

- 1) Give **four** examples of other direct expenses.
- 2) Give **four** examples of indirect expenses.
- 3) Distinguish between direct and indirect wages.
- 4) Fill in the blanks.
 - i) Direct Materials + + Other Direct Expenses = Prime Cost
 - ii) Prime Cost + = Works Cost
 - iii) Works Cost + Office Overheads =
 - iv) Prime Cost + + + = Cost of Sales

2.8 COST SHEET

A Cost Sheet is a statement showing various components of total cost which acts a guide to pricing decisions and a basis for cost control.

Basic Concepts

It is a presentation of cost data incorporating its various elements in a classified manner. In view of its valuable contents, a cost sheet should be prepared properly and at frequent intervals (weekly or monthly).

Possible information which may be incorporated into a cost sheet in accordance with the requirements of the business are:

- 1) Name of the product cost centre or cost unit
- 2) Period to which the statement relates
- 3) Output for the period
- 4) Details of various components of total cost
- 5) Item-wise cost per unit
- 6) Changes in stock position
- 7) Cost of goods sold
- 8) Profit or loss position

Proforma of cost sheet is given in Figure 2.4.

Figure 2.4 : Proforma of Cost Sheet

COST SHEET OF

for the month ending

Output units.....

		Total Rs.	Per Unit Rs.
Raw Materials Consumed:			
Opening stock of raw materials	xx		
Add: Purchases of raw materials	xx		
Less: Closing stock of raw materials	xxx		
Direct Labour		xxx	
Other Direct Expenses		xx	
			x
			x
PRIME COST		xxx	x
Factory Overheads:			
Indirect Material	xx		
Indirect Labour	xx		
Insurance on factory building & equipments	xx		
Other expenses of factory	xx		
Gross Factory/Works Cost	xxx		xx
Add : Opening Work-in-Progress	xx		
Less : Closing Work-in-Progress	xx		
Factory Cost or Works Cost		xxx	
Office & Administrative Overheads:			
Office Rent, Insurance, Salaries, office Expenses		xx	
		xx	x
COST OF PRODUCTION/ OFFICE COST		xxx	xx
(.....units)			

Add: Opening Stock of Finished Goods (.....units)	XX	
Less: Closing Stock of Finished Goods (.....units)	XXX XX	
COST OF GOODS SOLD (.....units)	XXX	XX
Selling & Distribution Overheads : Packing, Showroom, Advertisement, Sale, Staff Salaries/Travelling Expenses		
COST OF SALES (.....units)	XXX	XX
PROFIT (LOSS)	X	X
SALES/SELLING PRICE	XXX	XX

Look at Illustration 1 and see how cost sheet is prepared from given costing data.

Illustration 1:

From the following particulars of a manufacturing firm, prepare the Cost Sheet showing (i) Prime Cost, (ii) Works Cost, (iii) Cost of Production, and (iv) Cost of Sales.

	Rs.
Stock of materials on 1.1.2018	40,000
Purchase of Materials	11,00,000
Stock of finished goods on 1.1.2018 (5,000 units)	50,000
Productive wages	5,00,000
Finished goods sold (1,74,000 units)	24,36,000
Works overheads	1,50,000
Office expenses	1,00,000
Selling and Distribution expenses	1,74,000
Stock of materials on 31.12.2018	1,48,000
Stock of finished goods on 31.12.2018 (6,000 units)	60,000

Solution :

Before preparing the Cost Sheet, we should work out the number of units produced during the year.

Closing Stock	6,000
Number of units sold	1,74,000
	1,80,000
Less: Opening Stock	-5,000
Number of units produced	1,75,000

COST SHEET
For the year ending 31.12.2018

		Total Rs.	Per Unit Rs.
Raw Materials Consumed:			
Opening Stock	40,000		
Add:	11,00,000		
Purchases			
	11,40,000		
Less : Closing Stock	1,40,000	10,00,000	
Direct Wages		5,00,000	
Other Direct Expenses			
		15,00,000	
		1,50,000	
		16,50,000	
		1,00,000	
		17,50,000	10.00
		50,000	
		18,00,000	
		60,000	
		17,40,000	10.00
		1,74,000	1.00
		19,14,000	11.00
		5,22,000	3.00
		24,36,000	14.00

2.9 METHODS OF COSTING

Though, in all cases, the basic principles and procedure of costing remain the same, but on account of the nature and peculiarities of their business, different industries follow different methods of ascertaining cost of their products and services. These methods can be summarised as follows :

Job Costing: Under this method, costs are ascertained for each job or work-order separately. It is suitable for industries like printing, car repairs, foundries, painting and decoration, where each job has its own specifications.

Contract Costing: This method is used in case of big jobs described as ‘contracts’. The contract work usually involves heavy expenditure, stretches over a long period, and is undertaken at different sites. Hence, each

contract is treated as a separate unit for purposes of cost ascertainment and control. Contract costing (also termed as Terminal Costing) is most suited to industries like ship-building, construction of buildings, roads and bridges.

Batch Costing: Where work-orders are arranged in batches and the units produced in a batch are uniform in nature and design, each batch is regarded as a job and treated as a separate unit for purposes of costing. In such a situation, the method of costing adopted is known as 'batch costing.' It is generally used in industries like pharmaceuticals, bakery, toy manufacturing, etc.

Unit Costing: Under this method costs are ascertained for convenient units of output. It applies to products which are turned out by continuous manufacturing activity and can be expressed in identical quantitative units. It is suitable for industries like brick making, mining, cement manufacturing, dairy, flour mills, etc. This method is also called 'Single Output Costing'.

Process Costing: In case of some industries, a product passes through different stages of production called 'processes' and each process is distinct and well-defined. The output of each process is used as a raw material for the next process and may also be a marketable commodity. Take the case of cotton textile mill where the finished product (cloth) passes through three distinct processes viz., spinning, weaving and finishing. The output of spinning process is yarn, which is used as a raw material for the weaving process and the output of weaving process (coarse cloth) is transferred to finishing process. Yarn and coarse cloth can also be sold to other textile mills which may not have adequate spinning or weaving facilities. In such a situation, it becomes necessary to ascertain the cost at each stage. This helps in comparing cost with the market price as well as in cost control. The method employed for ascertaining the cost at each stage of production is termed as 'Process Costing'. It is used in case of chemicals, paints, textile and food products.

Operating Costing: This method is used for ascertaining the cost of operating a service such as bus, railways, water supply, nursing home, etc. In such organisations, the unit of cost is a service unit e.g., in case of buses the unit of cost is passenger kilometer, in case of nursing home it is per bed per day. According to the latest Terminology, this is called 'Service Costing'.

Multiple Costing: Where a produce comprises many assembled parts (or components) as in cases of motor car, typewriter, television, refrigerators, etc., costs have to be ascertained for each component as well as for the finished product. This may involve use of different methods of costing for different components and so it is known as 'multiple' or 'composite' costing.

Uniform Costing : The practice of using a common method of costing by a number of firms in the same industry is known as 'Uniform Costing'. Thus, it is **not a separate method of costing. It simply refers to a common system using agreed concepts, principles and standard accounting practices.** This helps in making inter-firm comparisons and fixation of prices.

It should be noted that the **two basic methods** of costing are: (1) Job Costing, and (2) Process Costing. The other methods discussed above are

simply variants of these two methods.

2.10 TYPES OF COSTING

While method of costing refers to the process and practice of ascertaining costs of products and services, the type of costing refers to the technique of analysing and presenting costs for purposes of control and managerial decisions. The types of costing (also known as techniques of costing) generally used are as follows:

Marginal Costing: It refers to the technique of costing which emphasises the distinction between fixed and variable costs and calculates the cost of a job or a product without taking fixed costs into account, It allocates only variable costs (direct materials, direct labour, other direct expenses and variable overheads) to production and is also known as 'Variable Costing. Absorption Costing: It refers to the technique of costing under which full costs are charged to production i.e., both fixed and variable costs are included in the cost of products.

Historical Costing: It refers to a system of cost accounting under which costs are ascertained only after they have been incurred. In other words, the accounting is done in terms of actual costs and not in terms of predetermined or standard costs. Most organisations follow this system of accounting for costs.

Standard Costing: It refers to the system of cost accounting under which costs are determined in advance on certain predetermined standards. These are known as standard costs which indicate the level of costs that should be attained under a given set of operating conditions. The standard costs are compared periodically with the actual costs and underlying causes for variances are analysed so that corrective action may be taken where necessary.

Thus, having adopted a method of costing suited to the nature of activity in which the undertaking is engaged, there is then a choice open with regard to the way in which the costing information is to be presented for control purposes. Either 'marginal costing' or 'absorption costing' may be employed and either 'actual costs' or 'standard costs' may be adopted to ascertain and account for costs.

2.11 ROLE OF COST ACCOUNTANT

After having understanding on the concept, classification, elements, methods and types of costing, it is important to know the responsibilities of a cost accountant. The role of cost accountant is entirely different from financial accountant.

The Cost Accountant is supposed to take essential steps for cost control, cost reduction and cost management. He has to work out for determining actual costs of manufacturing or providing service.

Cost accountant is basically responsible for the following three major activities which include:

1. Supporting top management is cost related decisions by providing

cost reports like cost of various products, Profitability, breakdown, variance analysis etc.

2. Prepare and maintain cost records for legal compliance. Cost records are different from financial accounts.
3. Performing cost control functions as directed by senior management. On the basis of reports provided by cost accountant the management would want the costing department to identify/implement various corrective measures.

In order to perform the above responsibilities in a service organisation or in a manufacturing concern, cost accountant has to play several prominent roles as stated below:

- Establishes a cost accounting department in his concern.
- Ascertains the requirement of cost information which may be useful to organizational managers at different levels of the hierarchy.
- Develops a manual, which specifies the functions to be performed by the cost accounting department. The manual also contains the format of various forms which would be utilized by the concern for procuring and providing information to the concerned officers. Usually, the functions performed by a cost accounting department includes a) cost ascertainment, b) cost comparison, c) cost reduction, d) cost control and cost reporting.
 - a) **Cost ascertainment**, requires the classification of costs into direct and indirect. Further it requires classification of indirect costs (known as overheads) into factory overheads; administration overheads and selling and distribution overheads.
 - b) **Cost comparison** is the task carried out by cost accountant for controlling the cost of the products manufactured by the concern. Cost accountant of the concern establishes standards for all elements of cost and thus a standard cost of the finished product. The standard cost so determined may be compared with the actual cost to determine the variances. Cost accountant ascertains the reasons for the occurrence of these variances for taking suitable action.
 - c) **Cost reduction** is the activity of different cost analysis are to be done by the cost accountant based on the situations for taking decisions like make or buy, market manpower & install infrastructure or outsourcing etc., and for reviewing the current performance.
 - d) **Cost control and cost reporting** is required to be done by the cost accountant in making alternative strategies for cost control to maximum extent and preparation of cost reports. These reports help the executives of a business concern in reviewing their own performance and in identifying the weak areas, where appropriate and most suitable control measures may taken in future.

Check Your Progress D

Basic Concepts

- 1) Explain the two basic methods and types of costing.
- 2) Which method of Costing would you recommend for the following industries?
 - i) Ship-building
 - ii) Toy Making
 - iii) Oil Refinery
 - iv) Sugar
 - v) Brick Making
 - vi) Construction of Bridge
 - vii) Road Transport
 - viii) Furniture
- 3) List out the responsibilities of a Cost Accountant.

2.12 LET US SUM UP

Cost ascertainment is an important process of accounting. Cost means an amount of expenditure (actual or notional) incurred or attributable to a product, job, process, or service. Cost is a flexible concept. It may vary with time, volume, firm, method or purpose. It should also be distinguished from the term 'loss' which refers an expenditure incurred without deriving any benefit therefrom.

Costs can be classified in various ways. On the basis of functions to which they relate, costs are classified into manufacturing costs, administrative costs, and selling and distribution costs. On the basis of their Identifiability with products, costs can be classified into direct costs and indirect costs. On the basis of their variability in relation to nature of output, costs can be classified into fixed costs, variable costs and semi-variable (or semi-fixed) costs.

The two concepts which serve as the basis for cost computation are: (i) cost unit, and (ii) cost centre. Cost unit refers to that quantity of a product in terms of which costs are ascertained e.g., per kilogram, per dozen, per piece, etc. Cost centre refers to the division of organisation into convenient segments with defined responsibilities to which initial allocation and apportionment of various costs can be made and which can be used for the purpose of cost-control. It can be a department, a person or an item of equipment.

There are three basic elements of cost: (i) materials, (ii) labour, and (iii) expenses. They may be direct or indirect, Indirect costs including Indirect materials, indirect labour and indirect expenses are known as 'overheads', Overheads are usually classified into factory overheads, office overheads, and selling and distribution overheads.

The main components of total cost are prime cost, works cost, cost of production and cost of sales. These are actually the stages to determine the total cost and facilitate control. There are various method of costing. These are: (i) job costing, (ii) contract costing, (iii) batch costing, (iv) unit costing, (v) process costing, (vi) operating costing, (vii) multiple costing, and (viii) uniform costing. Every organisation adopts the method which suits the

nature of its products and the technique of production used.

The role and responsibility of a cost accountant is different from a financial accountant. His/Her role starts from establishment of a cost department to preparation of costing reports to control the costs and effective utilization of costs.

2.13 KEY WORDS

Conversion Cost: Cost of converting materials into finished products. It includes direct labour, direct expenses and factory overheads.

Cost Centre: A convenient costing segment to which initial allocation and apportionment of various expenses can be made.

Cost of Sales: Total cost of a product including selling and distribution expenses.

Cost Unit: The quantity in terms of which the cost of a product is ascertained.

Prime Cost: Cost of direct expenses including those of materials and wages.

Semi-variable Cost: Expenses which change with changes in output, but not in the same proportion.

Standard Cost: A predetermined cost based on a technical estimate or material, labour and overheads for a selected period of time and for prescribed set of working conditions.

Works Cost: Prime cost plus factory overheads.

2.14 ANSWERS TO CHECK YOUR PROGRESS

- A) 5. (i) True (ii) False (iii) False (iv) True (v) False (vi) True
1. (i) e (ii) c (iii) b (iv) a (v) f (vi) g (vii) d
- C) 4. (i) Direct Wages (ii) Factory Overheads (iii) Cost of Production
(iv) Factory Overheads, Office Overheads, Selling and Distribution Overheads
- D) 2. (i) Contract Costing (ii) Batch Costing (iii) Process Costing
(iv) Process Costing (v) Unit Costing (vi) Contract Costing
(vii) Operating Costing (viii) Job Costing

2.15 TERMINAL QUESTIONS

- 1) Define the term 'Cost Centre'. Analyse the importance of selecting suitable cost centres.
- 2) Why do we need to qualify 'cost'? Discuss.
- 3) "Costs may be classified according to their nature and characteristics." Elaborate on this statement and clarify the meaning of fixed, variable and semi-variable costs with examples.
- 4) What are the different methods of costing? State the industries to which they can be applied.
- 5) State the main characteristics of the following methods of costing

Basic Concepts

and indicate in which industry each would be suitable

a) Process Costing; b) Job Costing; c) Output Costing.

6) The following figures relate to Rising Star Co.

	Rs.
Wages	3,000
Factory Expenses	4,000
Office Expenses	5,000
Materials	6,000
Selling Expenses	3,000
Distribution Expenses	3,000
Sales	24,000
Output	2,000 units
Number of units sold	1,500 units

You are required to compute

a) Prime Cost; b) Works Cost; c) Office Cost (Cost of Production);
d) Total Cost; e) Cost per unit; f) Profit during the period; g) Profit per unit.

Answer: a) Rs. 9,000; b) Rs. 13,000; c) Rs. 18,000;

d) Rs. 24,000; e) Rs. 12; f) Rs. 6,000; g) Rs. 3.

Note: These questions will help you to understand the unit better. Try to write answers for them and verify with the content. But do not submit your answers to the University. These are for your practice only.

SOME USEFUL BOOKS

Arora M.N. 2003. A Text Book of *Cost Accountancy*, Vikas Publishing House Pvt. Ltd.: New Delhi. (Chapter 3-8).

Bhar, B.K. 2018. *Cost Accounting: Methods and Problems*, Academic Publishers: Calcutta. (Chapter 5-9).

Iyenger, S.P., *Cost Accounting*, Sultan Chand and Sons.

Maheshwari, S.N. and SN. Mittal, 2018. *Cost Accounting: Theory and Problems*, Shree Mahavir Book Depot: Delhi. (Chapter 2-3).

Nigam, B.M.L. and G.L. Sharma, 2018. *Theory and Techniques of Cost Accounting*,

Himalaya Publishing House: Bombay. (Chapter 4-7).

Rajiv Goel, *Cost Accounting*, International Book House.