**NOTE 1: Basic concept of cost Accounting**

**Meaning of Costing**

Costing may be defined as ‘the technique and process of ascertaining costs’. According to Wheldon, ‘Costing refers to classifying, recording, allocation and appropriation of expenses for the determination of cost of products or services and for the presentation of suitably arranged data for the purpose of control and guidance of management. It includes the ascertainment of cost forever order, job, contract, process, service units as may be appropriate. It deals with the cost of production, selling and distribution. From the above definition, it will be understood that costing is basically the procedure of ascertaining the costs incurred in the course of producing a product or service. As mentioned above, for any business organization, ascertaining of costs is must and for this purpose a scientific procedure should be followed. ‘Costing’ is precisely this procedure which helps them to find out the costs of products or services.

**Importance and Basic Principles of Costing**

As compared to financial accounting, the focus of cost accounting is different. In the modern days of cut throat competition, many business organizations pay attention towards their cost of production. Computation of cost on scientific basis and thereafter cost control and cost reduction is of paramount importance. Hence it has become essential to study the basic principles and concepts of cost accounting. These principles and concepts are discussed in the subsequent part of this unit.

**Cost:-** Cost can be defined as the expenditure (actual or notional) incurred on or attributable to a given thing. It can also be described as the resources that have been sacrificed or must be sacrificed to attain a particular objective. In other words, cost is the amount of resources used for something which must be measured in monetary terms. For example – Cost of preparing one cup of tea is the amount incurred on the elements like material, labour and other expenses; similarly cost of offering any services like banking is the amount of expenditure for offering that service. Thus cost of production or cost of service can be calculated by ascertaining the resources used for the production or services.

**Cost Accounting:-** Cost Accounting primarily deals with collection, analysis of relevant cost data for interpretation and presentation for solving various problems of management. Cost accounting takes into cognizance, the cost of products, service or an operation. It is defined as, ‘the establishment of budgets, standard costs and actual costs of operations, processes, activities or products and the analysis of variances, profitability or the social use of funds’. Cost accounting is a combination of art and science, it is a science as it has well defined rules and regulations, it is an art as application of any science requires art and it is a practice as it has to be applied on continuous basis and is not a onetime exercise.

**Cost Accountancy:-** Cost Accountancy is a broader term and is defined 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 presentation of information for the purpose of managerial decision making. On the basis of the above definition, the following points will emerge: Cost accounting is basically application of the costing and cost accounting principles. This application is with specific purpose and that is for the purpose of cost control. Second, for ascertainment of profitability and also for presentation of information to facilitate decision making.

**Meaning of Cost Accounting**

If the objective of an organization is to close down a branch, then cost accounting should guide management by bringing out the cost and benefits of such management’s action. Cost accounting, therefore, is the process of collecting, summarizing, analyzing and reporting in monetary terms tailor made information to management showing the costs and benefits of pursuing each alternative course of action open to management. The cost figures that will be useful to management in deciding on long-term pricing strategy will be different from the ones for short-term pricing, especially, when the firm is operating at capacity.

**Define Cost Accounting**

1. Cost Accounting Information is meant for the use of internal decision makers of the business (ie. Management) while financial Accounting Information is for both Internal and External users.
2. They main objectives of preparing financial Accounting Information is to enable Management to render accounts of its stewardship in terms of the profit generated in relation to the assets invested in the business. On the other hand, the primary purpose of preparing cost accounting information is to aid internal decision making in the organization.
3. The preparation of financial Accounting must conform with what is known as Generally Acceptable Accounting principles **(GAAP)** and government regulation.In Nigeria, the Nigerian Accounting Standard Board **(NASB)** issued statements of accounting standards to guide thepreparation of published financial statement of companiesoperating in Nigeria. This is in addition to the operating inNigeria. This is in addition to the relevant provisions of the 1990companies and Allied Matter Act **(CAMA)**. Such standardized rules are necessary to facilitate communication between the business and the outside world between the business and the outside world that may wish to compare the information from the business with that of an entirely different business. There is no such laid down rule for the preparation of Cost Accounting Information besides the unwritten rule that the information is useful enough for the decision that needs to be taken.
4. The primary emphasis of Cost Accounting is segment reporting. This means that the costs and sales of individual products or parts of the business are prepared for management in order to know the profitability of each product or part. In Financial Accounting, the focus of reporting is on the totality of the business rather than individual parts.

5. Information gathering on Financial Accounting is on what happened (historical) rather than what is going to happen. While Cost Accounting Information gathering is both historical basis and future basis. Historical basis is used for example in ascertaining cost of material issues to a production department, the future information aid in decision making.

1. Financial Accounting Information is prepared at a specified period of time (usually quarterly or yearly) whereas Cost Accounting Information is prepared only when needed by management.

**Difference between Costing and Cost Accounting**

Main differences between costing and cost accounting are given as under:

|  |  |  |
| --- | --- | --- |
| BASIC DISTINCT  | COST | COST ACCOUNTING |
| Nature | It is a technique and process of ascertaining costs  | It is regarded as a specialized branch of accounting  |
| Scope | The costing techniques include principles and rules which govern the procedure of ascertaining the cost of products/services  | It involves classification, accumulation, assignment and control of costs.  |
| Process | The process of costing consists of routines of ascertaining costs by historical or conventional costing, standard costing or marginal costing.  | It involves establishment of budgets, standard costs or actual costs of operations, classification, recording and appropriate allocation of expenditure  |

**Essentials of a Good Costing System**

For availing of maximum benefits, a good costing system should possess the following characteristics.

a. Costing system adopted in any organization should be suitable to its nature and size of the business and its information needs.

b. A costing system should be such that it is economical and the benefits derived should be more than the cost of operating the cost system.

c. Costing system should be simple to operate and understand. Unnecessary complications should be avoided.

d. Costing system should ensure proper system of accounting for material, labour and overheads and there should be proper classification made at the time of recording of the transaction itself.

e. Before designing a costing system, need and objectives of the system should be identified.

f. The costing system should ensure that the final aim of ascertaining of cost as accurately possible should be achieved

**Essential Elements of Effective Cost Accounting Information**

For Cost Accounting Information provided for management to serve its role effectively, it should have some essential elements among which are:

1. The statement containing the information should have appropriate heading so that the management can know at a glance what the statement is all about.

2. The officer receiving the report must be the appropriate person for the decision on hand.

3. The information must be prepared timely if it is to be useful.

4. The cost information sent should be sufficiently accurate if wrong decision is not to be taken.

5. The information should be clear and concise for easier understanding.

 **Cost Classification, Methods and Technique**

 **Cost Classification**

Cost can be classified in accordance with the purpose for which the cost is needed. Some of the possible classification includes.

1. Behaviour of the cost in terms of whether it is fixed or variable.
2. The relevant or irrelevance of the cost to the decision on hand.
3. Direct or indirect.

**Costing Method**

Is a method of cost that centres on the business. For a business that deals with a standardized product made under mass production methods or through a series of production steps called processes the appropriate costing method to use in process costing. On the other hand, where the product made or service rendered is non standardized costing method to use in job costing or contract costing.

**Cost Technique**

Costing technique refers to the method used to determine the value of finished goods. Among these techniques that give different valuation

are:

1. Standard costing

2. Marginal costing

3. Absorption costing.

 **Fixed and Variable Costs**

A fixed cost is a cost that remains the same regardless of changes in level of activity while a variable cost is a cost that increases in direct proportion to the increase in level of activity. For example, in producing a one-page handout for a group of students, the cost of the stencil used for typing the one page is an example of a fixed cost while the cost of duplicating paper used is a variable cost.

 **Relationship between Contribution and Profit**

The relationship between contribution and profit can be stated as:

Profit = contribution – fixed cost

So that contribution = profit = fixed cost

This means that there are two ways of looking at contribution

(i) Contribution = sales – variable cost

(ii) Contribution = profit + fixed cost.

**The Importance of Contribution in Decision Making**

Contribution can be defined as the difference between sales and variable cost of the sales. The more the number of units sold, the greater the contribution towards the recovery of fixed cost for the period. After the recovery of fixed cost, any additional contribution made (above the fixed cost) is known as profit. The importance of contribution is derived from the fact that it is useful in a variety of decision like acceptance or rejection of special order, pricing, addition or deletion of a product line, make or buy and in the use of scare resource.

To any average business man who is not familiar with accounting, anytime he acquire an article for say N600 and then sells it for N1000, his ‘profit’ per unit is N400. Such notion of profit does take into consideration of transportation fare rent and electricity for the shop.

**NOTE 2: Element of Cost**

 **The analysis and classification of expenditure.**

The main classifications of business expenditure are:

(a) Materials

(b) Wages

(c) Expenses

However there are, two broad divisions to be noted, namely:

Direct Expenditure

Indirect Expenditure

The terms direct and indirect are to be understood as follows:

**Direct materials** means the cost of materials which enter into and become part of the product, e.g. the flour in bread, the clay in bricks, the leather in shoes and the wood in furniture. In some cases, however, it is not so easy to determine whether a material is to be regarded as direct or not, and the custom of the trade has to be taken into account or a decision which appears fair and reasonable in the circumstances has to be made.

**Direct wages** means the cost of wages paid to operatives who are immediately concerned with the manufacture of a product. That is to say, who “does” something to the raw material? If the concern is not a manufacturing business, but instead renders a service, then the term is related to those employees who directly carry out that service. Example of direct wages would be those paid to bakers, clay getters, shoemakers, cabinet-makers, and in the second category, to bus drivers and conductors and to postmen.

**Direct expenses** means those expenses incurred which without doubt are as much a cost of the product as are direct materials. Such might be the provision of special drawings or the cost of a special pattern. The amount of such expenses is likely to be relatively small, and the heading is often ignored with no great disadvantage. The sum of direct materials, direct wages and direct expenses is known as the prime cost.

**Indirect materials, wages, and expenses** may be simply be defined as all expenditure other than that regarded as direct. Although in accountancy the term “Indirect” expenses” is a common one, and is used in a general sense. Cost accountants have sought for a term which would definitely be understood to be embracive of indirect materials, wages and expenses. This they have found in the word “overhead”

 **Subdivision of overhead**

For the sake of classifying overhead suitably, it is sub-divided into:

(a) Production overhead;

(b) Administrative overhead;

(c) Selling overhead;

(d) Distribution overhead;

**Production Overhead**

This refers to the indirect works expenditure incurred, and it consists of the three elements i.e indirect materials, indirect labour and indirect expenses.

**(a) Indirect materials**

Any materials used in the course of manufacture which either cannot be traced as part of the product or which are too small in value to be conveniently measured. Examples of indirect materials are:

! Dustbins

! Soap

! Oil and grease.

In the category of direct materials of minor value which are treated as indirect, we have for instance; thread used in shoe manufacture; glue used in the furniture trade;

**(b) Indirect labour**

The cost of labour employed in the works or factory which is ancillary to production. Examples are:

! Inspectors;

! Supervisors;

! Workshop cleaners;

! Internal transport staff

**(c) Indirect expenses**

Expenses incurred by the undertaking which may be either allocated to the factory or partially apportioned to it. Examples are;

Power, lighting and heating

! Rent and rates

! Water

! Insurance

! Depreciation

It will also include services such as:

! Work canteen;

! Industrial nurse;

! Fire precautions;

! Research.

**ADMINISTRATION OVERHEAD**

This refers to the expense incurred in the direction, control, and administration of an undertaking. The same elements of material, labour, and expenses permeate the headings under this and the remaining two classifications, but it is not usually necessary to consider them in those separate categories. Examples of administration overhead are:

Salaries and wages of executives and clerks on the administrative staff, rent and rates.

Lighting and heating.

Insurance.

Office printing and stationery.

**Selling Overhead**

This classification comprises the costs incurred in securing orders from customers for the products dealt in by the concern. Examples are:

! Staff,

! Advertising

! Sales department expenses,

! Samples displays,

! Catalogues

**Distribution Overhead**

This consists of all expenditure incurred in handling the product from the time it is completed in the works until it reaches its destination. Examples of such expenditure are:

Warehouse wage and salaries

Packing cases

Loading expenses

Upkeep and running charges of delivery vans.

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**NOTE 3: The Methods of Cost Accounting**

 **Methods of Ascertaining Actual costs**

From the two types of cost accounting methods, eight methods of ascertaining actual cost may be identified. These methods have emerged because peculiarities of certain kinds of production have resulted in the adoption of variations in procedure. They are briefly defined below;

**(a) Job costing**

This is sometimes referred to as terminal costing; it also includes contract costing. This method is used to cost jobs or contracts that are kept separate during manufacture or construction. It is applicable, for instance, to job order work in factories and work by contractors, builders, constructional engineers, shipbuilders, printers, municipal engineers, garages, film studies etc. The unit of cost is the job, order, or contract, and the accounts show the cost of each order.

**(b) Batch Costing**

This is a form of job costing, a convenient batch of production being treated as a job. Each batch is separately costed from which unit costs are determined for the units produced. It is useful for biscuit factories, bakeries e.t.c

**(c) Unit Costing**

This was formerly known as output or single costing. It is a method of costing by unit of production where manufacture is continuous and the units are identical, or may be made so by means of ratios. It may be employed in conjunction with batch, operation, or process costing, and is suitable for such undertakings as collieries, quarries, flour-mills, steelworks, paper-mills, breweries etc. in all of which there is a standard or natural unit of production. It is also used in municipal costing.

Examples of suggested units of cost in certain industries are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **INDUSTRY** | **UNIT OF COST** | **INDUSTRY** | **UNIT OF COST** |
| Steel-works | Ton of steel | Copper-mines | Ton of copper |
| Quarries | Ton of stone | Paper-mill | Ton or per kilogram |
| Collieries | Ton of coal | Textile factory | Metre of Material |
| Milling | Sack of flour | Brick-making | Thousand bricks |
| Breweries | Barrel of beer | Spinning-mill | Kilogram of yarn |

In effect, when all the units produced are identical, the cost per unit is ascertained by finding the total expenditure and dividing by the number of units produced in a given period.

**(d) Operating Costing**

This is unit costing as applied to the costing of services, such as those afforded by railways, motor-coaches, carriers, electricity supply and water undertakings. For example, in the case of the transport services mentioned, it may be desired to know the cost per kilometre, per tonne,

per passenger, or the cost per tonne/km, per passenger/km, per parcel/km etc.

**(e) Operating Costing**

This is method of unit costing by operations in connection with mass production and repetitive production. It is particularly useful where the production is put in large quantities of standardized units, as is usually necessary to ensure working at minimum cost. There is usually an uninterrupted flow of production, and the work is dividend up into as many operations as are convenient, thus obtaining the fullest advantage of division of labour to ensure maximum output at each operation. In this method, the cost per unit is found for each operation and at also for

the finished unit. It is used in industries such as motor cars, radio and aero planes.

**(f) Process Costing**

This is sometimes referred to as continuous or average costing. This is a method of costing production by processes in which:

(i) The product of the process becomes the material of a subsequent process;

(ii) The different products and by-product (if any, are produced simultaneously at the same process;

(iii) The products, differing only in shape or form on completion, are not separately distinguishable from one another during one or more process of manufacture. Typical industries for which the method is suitably are concerned with chemicals, textiles, foods, paints and varnishes, etc. The cost of each process and the cost per unit at each stage are usually shown by the accounts. In simple process accounts the findings of the cost per unit at each process is similar to the procedure used in unit costing referred to above

**g. Multiple costing**

This is sometimes referred to as composite costing. It is used when there are a variety of component parts separately produced.

**h. Departmental Costing**

This is a method of ascertaining the cost of operating a department or cost centre. This is frequently necessary because of the need of control of expenditure in a department, e.g. the cost of running a research department, or because of the desire to allocate the costs of a department

to another department or cost unit, e.g. the allocation of the inspection department costs to production departments or the allocation of costs the stores to various contracts.

 **SPECIAL SYSTEMS**

The nature of the product will determine which of the eight methods will be adopted in any business. However, in addition to these methods, mention should be made of three other systems which are not alternatives to those discussed already, but are techniques which may be adopted for special purposes of control and policy.

**1. Uniform Costing**

This term refers to the use of a common method of costing for different undertakings or producers in the same industry. When used in a number of factories operated under a central control, detailed costs can be compared and considered with the assurance that the figures under each heading have been built up on the same basis.

A uniform system may also be adopted by an association or federation of manufacturers in an industry, not usually for purposes of cost comparisons, but for guidance of the members and sometimes for joint action for the benefit of the industry.

**2. Marginal Costing**

This is concerned particularly with the effect which fixed overhead has on the running of a business. It is a method interpreting costs of a product at given volumes of output. It will be apparent that certain items of cost are, within limits, fixed or constant for each unit produced, whatever the quantity, but other costs vary according to the output quantity. A marginal cost is the amount of change in aggregate cost resulting f5rom an increase or decrease in the volume of output by one unit of production.

**Standard Costing**

This includes the term predetermined costing. Under this method the actual performance is compared with the predetermined performance, thus revealing any variance between the two. These variance can then be investigated, so that, where necessary, management can take the

required action.

 **Cost plus Costing**

Reference may now be made to a method of cost accounting which is very infrequently used in industry in modern times, except, perhaps, in the building trade and in firms engaged on Government contracts during war-time. However, this method was used widely before the introduction of the more modern techniques which have been outlined above. Such contracts originated in the building trade, and were costed by what is known as the cost plus method of costing.

This is a form of costing in connection with contracts placed with manufacturers or builders on the basis of cost plus an agreed percentage of profits. The cost refers to direct material, direct labour, and admissible direct expenses, such as plant hire, transport of plant and materials, etc. To the cost is added an agreed sum or percentage to cover overhead expenses and profit.

The method was much used before and during the First World War and to a lesser extent during the Second World War. Surprisingly enough, it is still used frequently in the building trade even in the U.S.A. It is normally used only when there is need for rapid execution of contracts without waiting for the fixing of definite contract prices. The method is not regarded as satisfactory in normal circumstance owing to the possibility of abuse. When the method is used, the accounts are scrutinized by accountants appointed by the authority which placed the contracts. The reason for avoiding the use of this system whenever possible will be obvious after considering the following points.

1. It is in the contractor’s interest to run the cost as high as possible, so that the percentage profit which is calculated on the total cost will be high.
2. There is a great possibility of collusion between the contractors and any sub-contractors or merchants supplying materials or services.
3. Inefficiency may be encouraged, resulting in overtime being necessary to complete the contract in time. This is beneficial to the employees, who receive larger pay packets, and to the employers, who receive larger profit. Ironically, the contract may even be happy because the job is completed in time.

However, expedient this method may be, and in some circumstances it may be the only possible method, it cannot be considered scientific costing.