Summary

Chapter One (A)

Cost Accounting - An Introduction

Introduction :

1. Concept of Costs

Cost is considered as a sacrifice as it is an amount of resources given up in exchange for some goods or services.

CIMA, London, defines cost as the amount of expenditure (actual or notional) incurred on, or attributable to a specified thing or activity.

AAA, USA, defines cost as a foregoing, measured in monetary terms, incurred or potentially to be incurred to achieve a specific objective.

Every firm is manufacturing a product or providing a service. Towards this objective it incurs cost in the form of materials, labour or expenses. The firm wants to know the cost per unit of the product or service. Normally it

is determined by dividing total cost by total units produced. However, this task becomes complex when the firm makes more than one product.

The objective with which costs are compiled is important as it decides components of costs. If the objective is to determine selling price, then all items costs are included. If it is to value stocks,

production cost is included but selling & distributions costs are excluded. On the other hand, if the aim is to measure efficiency, only variable costs are considered and fixed costs ignored.

To understand precise meaning of cost, it is modified as prime cost, fixed cost, sunk cost etc.

Correct understanding of the cost helps achievement of its three basic objectives viz.

- **Cost Ascertainment**
- **Cost Control and**
- **Cost Presentation.**

It must be noted that, there is no such thing as

Exact Cost or True Cost

◘ **Most of the cost information is based on some estimates.**

◘ **Overhead expenses are estimated in advance and further, they are distributed over cost units on pre-determined estimated basis.**

◘ **Using accepted accounting principles, depreciation cost is calculated by companies in a different manner providing different amounts.**

Calculation of absolutely correct cost, thus, is quite difficult! And if one was to calculate it, by the time it is ready, it would have lost all its relevance and, therefore, value!!

Classification of Costs

Different bases used for Classification of Costs are

a. ***By Time*** **– historical, predetermined.**
b. ***By Nature of Elements*** **– Material, Labour, Expense.**
c. ***By Traceability*** **– Direct, Indirect.**
d. ***Association with product*** **- Product or Period Cost.**
e. ***Change in Activity*** **– Fixed, Variable, Semi-fixed.**
f. ***By Function*** **– Manufacturing, Selling, Research.**

g. Relationship with Accounting Period –
Capital, Revenue.

h. Controllability - **controllable or not.**

i. For Analytical, decision making Purpose –
Opportunity, sunk, differential,

joint, common, inputs, out-of-pocket, marginal, uniform, replacement.

j. Other **– conversion, normal, traceable, avoidable etc**

a) Based on Time.

i) Historical costs:

- **Ascertained after they are incurred.**
- **Available after production is completed.**
- **Are objective in nature.**
- **Can be verified with reference to actual operations**

ii) Pre-determined costs:

They are ascertained before they are incurred.

a) Estimated costs calculated before start of production. Hence they may not be accurate.

b) Standard costs are predetermined with set up standards, compared with actual costs to find out differences for remedial action. Standards are set up with utmost care.

b) By nature of element.

i) Material:

The substance from which the product is made is known as material.

Direct Material **refers to those materials which become a major part of finished products and can be easily traced to units.**

Direct Materials include

- **Materials specifically purchased for a job.**
- **Materials acquired and later requisitioned from stores.**
- **Components purchased or produced.**
- **Primary packing materials.**
- **Materials passing from one process to another.**

Indirect Material **refers to those materials**

- **Which are used for purposes ancillary to production and**
- **Which cannot be conveniently assigned to specific physical units.**

ii) Labour :

Labour cost is classified into direct labour and indirect labour.

***Direct labour* is wages paid to workers engaged in production process whose time can be conveniently traceable to units of products.**

***Indirect Labour* is wages paid to workers for carrying tasks incidental to production.**

iii) Expenses :

Expenses may be direct or indirect.

***Direct expenses* are incurred on a specific cost unit and identifiable with it.**

***Indirect expenses* cannot be directly, conveniently and wholly allocated to cost center or cost unit.**

Examples rent, rates and taxes, insurance, lighting etc.

Indirect expenses should not be mixed with overheads; latter includes in addition to indirect expense, indirect material and indirect labour.

c) By nature of traceability.

Product costs are distinguished as direct and indirect costs.

- **Direct costs are traceable to a product or specific activity.**
- **Indirect costs are difficult to trace to any product.**
- **Whether cost is direct can be decided only by reference to a cost unit.**

d) By association with the product.

Costs are distinguished as

<u>product cost</u>

- **Product costs are traceable to the product and included in inventory values.**
- **Product costs in a manufacturing unit are a sum of direct material, direct labour and overheads.**
- **On sale of goods they transferred to P & L a/c.**

or <u>period cost</u>.

- **Period costs are incurred on the basis of time. Salaries, rentals etc.**
- **They include selling and administration costs essential to keep business running.**
- **But they cannot be associated with product**

Selling and administrative costs are period costs as they are fixed in nature, very difficult to apportion to products as they do not relate to products. Benefits from these expenses cannot be easily established

e) By changes in activity or volume.

Costs are classified as fixed, variable or mixed cost.

Fixed costs-

The cost which is incurred for a period, and which, within certain output and turnover limits, tends to be unaffected by fluctuations in the levels of output is termed fixed cost.

Fixed costs are classified for analysis into –

***Committed costs* incurred to maintain certain facilities.**

Policy or management costs **incurred for implementing management policies, e.g. executive development**

Discretionary costs **are not related to the operations & are totally under management control e.g. research.**

Step costs **are fixed for a certain range of output and increase by fixed amount every time that range is crossed.**

Variable costs -

Variable costs are those that vary directly and proportionately with the output. Variable cost per unit is constant, but total variable cost changes with output. Variable cost is expressed in terms of units e.g. Rs. per kg. and not in terms of time

Mixed costs -

Mixed costs are semi-variable or semi-fixed. Because of variable element they change with output and because of fixed element they do not change at the same rate as output

f) Functional classification of costs.

i) ***Manufacturing / Production cost*** **is the cost of operation of a manufacturing division of an undertaking.**

It includes

Direct material and labour,

Factory overheads and

Primary packing costs

ii) Administration costs **– are indirect and cover all expenditure in formulating the policy, directing the organization and controlling operation of a concern. They exclude costs related to research, development, production, distribution and selling functions.**

iii) Selling and distribution cost. **Selling cost is the cost of seeking to create and stimulate demand e.g. advertisements or market research. Distribution cost is the expenditure incurred which begins with making packaging materials available for dispatch and ends with making the reconditioned packages available for re-use. Includes warehousing, cartage, transport etc.**

iv) Research and Development costs **include cost of discovering new ideas, processes, products by experiment and implementing such results on a commercial basis.**

v) ***Pre-production costs*** **include expenses incurred after a new factory or product is started and before regular run of production is started. Include cost of trial runs, experiments etc.**

Such costs are treated as deferred revenue expense and charged to future production on pro-rata basis.

g) Relationships with accounting period.

Costs can be capital or revenue.

Capital expenditure provides benefits in future period and is classified as an asset.

While revenue expenditure provides benefits only for the current period and is related as expense. However, when an asset is depreciated, depreciation amount becomes revenue expense.

h) Controllability.

Controllable Cost **is a cost which is influenced by its budget holder. Cost which is not subject to control is termed as non-controllable.**

This difference is very important for

- **Cost accounting,**
- **Cost control and**
- **Responsibility accounting**

i) Costs for analytical & decision making purposes.

i) **Opportunity costs –**

Opportunity cost is the cost of selecting one course of action and the losing of other opportunities to carry out that course of action. They are benefits lost by rejecting the best competitive alternative to the one chosen. If amount is invested in Plant & Machinery, it cannot be invested in shares. Income that would have arisen from shares is the opportunity cost investing in Plant.

ii) Sunk costs.

Sunk cost is one that has already been incurred and cannot be avoided by decisions taken later. It is also defined as an expenditure for equipment or productive resource which has no economic relevance to present decision making process.

iii) Differential cost.

Differential cost is the difference in total cost between alternatives, calculated to assist decision

making. It results from

a) Producing and distributing a few more (less) of products.

b) A change in method of production / distribution. c) Addition or deletion of product / territory or d) Selection of an additional sales channel.

iv) Joint costs.

When processing of a single raw material results in two or more products simultaneously, costs incurred upto the point of separation, termed split off point, are joint costs. These can be apportioned over joint products using a suitable formula.

v) Common costs.

Common costs are incurred for more than one product, job, territory, or any other costing object. They are not related to any individual product and hence need to be apportioned. They are incurred as result of management decisions. Rent of a factory is a common cost to all departments in it.

vi) Imputed costs.

Imputed costs are costs not physically incurred but useful for decision making in a particular situation. These are notional costs & hence do not enter books of accounts e.g. interest on own funds or salaries to owners etc.

vii) Out of pocket costs.

Out of pocket costs are costs or outlay required for an activity. The activity should be able to cover, at least this cost, of the project.

viii) Marginal costs.

Marginal costs are aggregate of variable costs. i.e. prime cost plus variable overheads.

ix) Replacement costs.

They are costs of replacing an asset at its current market value. When an asset needs replacement, its original cost is not relevant, and management considers its replacement

j) Other Costs

i) *Conversion cost* is the cost of a finished or work in process, comprising direct labour and manufacturing overheads. It excludes direct material cost, but includes losses (gains) in weight or volume of material arising of production process.

ii) *Normal cost is* normally incurred at a given level of output in the conditions in which that level of output is normally achieved.

iii) *Traceable cost* is the cost that can be easily associated with a product, process or department.

iv) *Avoidable costs are* those costs which need to have been controlled. e.g. abnormal spoilage, unfavourable cost variance due to labour inefficiency.

v) *Unavoidable costs* are the costs that under present conditions must be incurred.

vi) *Total costs* are the sum total of costs associated to a particular unit, process, department or the entire concern. Or = material + labour + overheads.

***vii) Value added* strictly is not a cost. It is difference between selling price of a product less its material cost.**

Costing & Cost Accounting

Costing is the technique & process of ascertaining costs. It consists of principles and rules for ascertaining cost of product or process. The techniques differ from industry to industry and are dynamic and change with time.

Costs are ascertained in any of the following ways.

Historical or Conventional costing :

Under this method cost is calculated after activity is completed. Past actual figures are used for calculation, hence the term historical. The method can be used only to determine costs; and cannot be used to control costs.

Standard costing :

Standard costs are prepared and applied to measure and analyze variations and take action for maximum efficiency in production. Current & anticipated figures are used for determining standard costs under normal or ideal conditions.

Marginal costing :

Marginal costs are ascertained by differentiating between fixed & variable costs. Effect on profit due to change in volume or type of output is examined. Under this method marginal costs are charged to products & fixed costs are charged to the profit & loss a\c.

Cost Accounting :

Cost Accounting is a specialized branch of accounting, which involves classification, accumulation, assignment and control of costs. It consists of establishment of budget, standard costs and actual costs of operations, processes, activities or products, and analysis of variances, profitability or the social use of funds.

General Principles of Cost Accounting :

(1) A Cost should be related to its causes. This assists in its identification with cost units for which it is incurred.

(2) A cost should be charged only after it is incurred.
In determining cost of unit, only cost incurred for making it is to be considered. Thus selling cost cannot be charged to a cost unit stored in a factory.

(3) The convention of prudence should be ignored. A cost statement should, as far as possible, give the facts without any bias.

(4) Abnormal costs should be excluded from cost accounts. To avoid distortion of costs and to provide meaningful data to management for decisions, abnormal costs like costs of accidents, negligence be excluded from cost of product..

(5) Past costs should not to be charged to future period. A cost, which could not be recovered in a period, should be written off in that period. It is not carried forward to the next period so that cost data is not vitiated.

Objectives of Cost Accounting :

Cost accounting aims at determining costs of each product or service. This data is then used by the management to

economize on costs,

fix price,

and maximize profit.

Towards this end it aims

1. To analyze & classify all expenditures with reference to the cost of products and operations.

2. To arrive at the cost of production of every unit, job, operation, process, department or service and to develop cost standard.

3. To indicate to the management all types of inefficiencies, wastages, mis- or non- use of assets and analysis of causes so that corrective action is arranged.

4. To provide data for profit & loss accounts and balance sheet at required intervals. The data to be provided for the firm and its individual activity, department, product etc. The data needs to be accompanied by its analysis for action.

5. To reveal sources of economies in production

6. To provide actual data for comparison with estimates and serve as guide for price-fixing policy.

7. To provide variances of actual costs from standard costs.

8. To prepare comparative cost data for various periods, departments, volumes to guide development of business and help budgetary control.

9. To record the relative production results of each unit of plant & machinery in use, as a basis for examining its efficiency.

10. To provide a perpetual inventory of stores and other materials so that interim profit & loss a/c and balance sheet can be prepared without physical stock taking.

11. Last but not the least, to provide information for decisions regarding price for special customers, make and buy decisions, assigning priorities to various products.

Financial Accounting & Cost Accounting :

Financial Accounting reveals profits & losses of the business as a whole during a particular period.

Cost Accounting shows, by analysis and localization, the unit costs and profits & losses of different product lines.

The main differences are summarized below –

♠ Financial accounting provides suitable information to shareholders, creditors and safeguards interests of the business & its proprietors.

Cost accounting renders information to the management for proper planning, operation, control & decision making.

♠ Financial accounting meets requirements of the Company Acts, Income Tax Acts and other statutes. Cost accounts are maintained voluntarily except for some manufacturing companies who have legal obligation to maintain cost records.

♠ **Financial accounting emphasizes measurement of profits, cost accounting aims at ascertainment of costs and collects data for this purpose.**

♠ **Financial accounting discloses the net profit and loss of the business as a service. This allows the management to maximize profits by dropping less profitable products and focus on more profitable products.**

♠ **Financial accounting provides operating results, supplemented by cost reports as & when required, using actual data. Cost accounts deals partly with facts & partly with estimates.**

♠ **Transactions are recorded in a subjective manner under Financial accounting. Emphasis is on planning & control in cost accounts, hence transactions are recorded objectively.**

♠ **The costs are reported in aggregates in financial accounting but into unit basis in cost accounts.**

♠ **Data on relative efficiencies of workers, plants & machinery, processes is provided in cost accounting but not in financial accounting.**

♠ **Stocks are valued at cost or market, whichever lower, in financial accounting. Under cost accounting they are valued at cost.**

Limitations of Financial accounting :

1. It cannot measure efficiency with which each task has been carried out in the organization.

2. Expenditure control is not possible as it does not provide data on how much should be spent.

3. It does not offer any guidance for fixing selling prices.

4. It does not provide information to prioritize products to maximize profits.

5. It does not assist management in determining break-even point.

6. It does not provide basis for planning, forecasting or budgeting.

7. Since financial accounts do not measure efficiency and control, they are not of much help to avoid waste and losses.

8. It fails to provide data for reports required by agencies like banks, government authorities etc.

Importance of Cost Accounting:

(a) Costing as an aid to management :

- Cost accounting provides invaluable information to management.

- To derive full benefit from it, management should be capable of using it in a proper manner.

- A good system of costing offers these advantages:

1. Assists in periods of trade depression & trade competition.
2. Aids price fixation.
3. Provides reliable basis for estimates & quotations.
4. Channelizes production on right lines.
5. Eliminates wastages.
6. Provides comparative data.
7. Provides data for periodical P & L a/c as & when required.

8 Determines and enhances efficiency.

9 Helps inventory control.

(b) Costing as an aid to creditors :

Costing provides valuable data to creditors, investors, banks, and other money lending institutes to form their judgment regarding profitability and future prospects of the of the organization.

(c) Costing as an aid to employees :

Costing provides continuous employment and higher remuneration by way of incentives, bonus plans, etc.

(d) Costing as an aid to National Economy:

An efficient Costing System provides prosperity to the business enterprise which in turn results in stepping up of government revenue.

Overall economic development takes place as a consequence of increased efficiency of production.

Next Chapter One Part B, please continue ……

Chapter One (B)

Cost Accounting - An Introduction

Cost Center & Cost Units:

Cost Center

Costs are ascertained by Cost Center, cost unit or both. Cost center means a production or service location, function, activity or item of equipment whose costs may be attributed to cost units.

Cost centers are classified as

Productive - where raw material is converted into saleable products.

Unproductive - where services essential to productive centers are provided

and mixed cost centers which carry both productive & nonproductive activities.

Personal - which consists of a person or a group of persons.

Impersonal - which consists of a department or a piece (or a group) of equipment

Operation - which consists of machine/s and/or person/s carrying out same operation .

Process - **which consists of a continuous sequence of operations.**

Determination of a suitable cost center is crucial for ascertainment & control of costs.

Cost Units

Cost unit is defined as a unit of product or service in relation to which costs are ascertained.

Some examples :

Industry / product	Cost Unit
Automobile	Number
Cement	Tonne
Transport	Tonne Kilometer
Chemicals	Liter or Kilogram

Cost units are determined after considering following factors.

- **Organization of factory**
- **Conditions of incidence of costs**
- **Requirements of the costing system**
- **Availability of information**
- **Management policy**

Methods of Costing :

Even though fundamentals of ascertaining costs are same in every system, methods of analysis and presentation of costs differ from industry to industry.

There are two principal methods of Costing; namely

Job Costing and Process Costing.

Job Costing.

(i) Job costing method refers to a system of costing in which costs are ascertained in terms of specific jobs or orders which are not comparable

with each other. (e.g. printing press, auto garage, ship building). Job costing includes -

(a) contract costing is a method applied where large scale contracts at different sites are carried out.

(b) batch costing – under this method a batch of similar products is considered as a job & cost of this complete batch is ascertained.

(c) terminal costing - under this method the cost is properly terminated at some point and related to a particular job.

(d) operation costing – this method is adopted when it is desired to ascertain the cost of carrying out a certain operation in a department. (e.g. welding)

Process costing.

Where a product passes through distinct stages or processes the output of one process being the input of the next, it is desired to ascertain the cost of each stage or process. This is known as process costing. (e.g. textile, refinery, soaps)

Single-Output costing

Where a single article is produced or services rendered by continuous manufacturing activity, this method is adopted.

The cost of whole production is ascertained and the cost per unit is calculated by dividing the total cost by number of units produced.

Operating costing.

This method is applicable where services are rendered rather than goods produced.

The total expenses of the operation are divided by the units and cost per unit of services is arrived. The method is applied in Railways, electricity companies, hospitals etc.

Multiple or Composting.

This method is for complex products where a single method cannot be applied. Cost of components is calculated by job or process costing and they are aggregated in assembly through use of the single or output costing system. Used in car or airplanes manufacturing, machine tools, sewing machines, bicycles industries

Uniform Costing

This is a name given to a common system of costing followed by a number of firms in the same industry.

Performance of one firm can be easily compared with that of the other.

Department Costing.

When costs are calculated department by department the method is called departmental costing. Within the department, cost is calculated with the help of job costing or unit costing.

All these methods can be used with or without following techniques of costing.

(a) Standard Costing or

(b) Marginal Costing.

Cost Accounting Department.

Cost accounting department has different relations with other departments in each industry. It maintains cost records for manufacturing as well as non-manufacturing departments. Further it analyzes costs of production, marketing and administration. The department closely interacts with Manufacturing, Research & Design, Personnel, Marketing, Public Relations, Legal etc. departments.

Installation of a Costing System.

For a few selected industries, the Central government can, by an order, make installation of a costing system compulsory. However, Most of the firms install costing system for its utility.

Costing system :

- **accumulates costs**
- **assigns them to cost objective**
- **reports cost information.**

The system has to be designed to meet following needs of the organization :-

The objective : can be as simple as ' to fix price'. Normally it includes ' measure and control efficiency'. For a few industries ' to meet legal requirements' is the objective.

Decision-making points : the levels of management that require cost data for decisions.

Significant operations : greater attention is required for areas accounting for bulk of expenditure.

The system is to be designed to suit the profile of the firm in particular and industry in general.

Please note the firm need not change the method of its operation just to suit the system designed.

Pre-requisites for installation of a costing system.

- **Clear cut authority and responsibility for different individuals.**
- **Full support from management.**
- **Cooperation from staff & workers to generate enthusiasm.**
- **Utilization of all available data from financial books of accounts. If adequate data available, it may not be necessary to have a separate costing department.**

Matters that need proper consideration:

- **Memorandum and articles, organization charts etc. on the executive side.**
- **Financial accounting records current & last audited on accounting side.**

- **The existing forms, registers, documentation on the internal control side.**

- **On technical side several items like factory layouts, purchase procedures, wage payments,**
- **characteristics of products manufactured, cost centers and cost units need due review.**

- **The system should be economic to install & operate, provide accurate reports promptly, capable of controlling costs.**

Accuracy, equity, simplicity, elasticity, comparability, promptness, observance of instructions, periodical results, and reconciliation with financial accounts are some other important matters that deserve close attention.

Organizing a Cost Office

The office preferably be located near the factory for efficient coordination.

Its duties include

1. **Stores accounts: maintain stores ledgers & prepare material abstract.**

2. **Labour accounting: Evaluate time sheets, job cards & prepare labour abstract.**

3. **Cost accounts: maintain job process or service accounts.**

4. **Cost control: Abstract cost control accounts from information.**

5. **Statistical reports: Prepare special reports for management for investigation & action; and periodical trading statements.**

Practical Difficulties in installing a Costing System

- **Lack of support from top management.**
- **Resistance from the existing staff. Change is normally disliked by average employees.**
- **Non-cooperation at other levels of operation.**
- **Shortage of trained staff.**

- **Heavy costs. This is especially true, when the system designed in a manner not suitable to the organization.**

How can these difficulties be overcome?

1. **Obtain firm commitment from the management prior to installation of cost system.**

2. **Impress existing accounting staff about the need to supplement existing system with cost accounting.**

3. **Educate employees regarding benefits of the new system.**

Direct Expenses & Overheads.

1. Direct Expenses

Meaning, Importance & control.

Direct expenses are capable of being directly charged to the job. They form part of Prime Cost. They include costs, other than materials or wages which are incurred for a specific product or saleable service.

Royalties charged per unit, hire charges for a specific job, sub-contract work of a job, sales commission per unit sold, Freight, traveling etc for a particular job, cost of making a design or a pattern for a job are all examples of direct expenses.

These are directly debited to Direct Expense a/c & accounted against a job.

Items under this head are few & generally controlled by fixing standards and investigating variations.

2. Indirect Expenses.

Indirect Expenses are the expenses that cannot be conveniently, directly and wholly allocated to cost centers or cost units.

Examples – rent, rates and insurance of factory & office.

Depreciation, repairs & maintenance of machinery, equipment, furniture.

Power, fuel, lighting of factory and office.

Advertising, legal charges, audit fees, bad debts.

Certain exclusions from costs:

Matters of finance like interest, dividend on investment, profit or loss on sale of company assets, transfer fees etc. do not form a part of costs. Similarly, appropriation of profits, income tax , transfer to sinking fund are not cost items.

On the other hand, costs include notional cost in the form of rent for factory premises owned by the firm.

3. Overheads – Meaning

Overheads is sum of the cost of indirect material, indirect labour and such other expenses, including services, as cannot be conveniently charged direct to a specific cost centers or cost units.

In modern times overheads assume significant proportion of total cost.

They are to be estimated for allocating on a continuous basis to cost centers and cost units. Allocation is carried using estimated basis for allocation. These factors emphasize importance of proper accounting for overheads.

4. Classification of Overheads

The process of classification involves

- **determination of classes for grouping expenses**

- **grouping expenses in those classes.**

Classification of overheads depends upon

- **size & type of business**

- **nature of product or service rendered**

Basis for classification

i) **Function-wise**
ii) **Behaviour-wise**
iii) **Element-wise**

i) **Function-wise classification –**

A] Manufacturing or production overheads: is a sum of indirect material, labour and expense incurred for operation of manufacturing or production division.

B] Administrative overheads: are costs of general management, secretarial, accounting and administrative services which cannot be directly related to production, marketing or research & development functions.

C] Selling & Distribution overheads: Selling overheads is the cost of seeking to create & stimulate demand and of securing orders. Distribution overhead is the expenditure incurred in the process which begins with making the packed products ready for dispatch and ends with making the reconditioned returned empty package, if any, available for re-use.

ii) Behaviour-wise classification:

A] Fixed overheads: are those which remain fixed in total amount with increases or decreases in volume of output or productive activity for a particular period of time.

They are, therefore, generally considered to be uncontrollable for specified period.

B] Variable overheads: are those costs which vary in total, in direct proportion, to the volume of output. Variable overhead changes in total but its incidence remains constant per unit

C] Semi-Variable overheads: are fixed and partly variable. Normally they remain unchanged for a certain activity level and changes usually by fixed amount every time that level is crossed.

Classification of overheads into fixed & variable offers advantages for

- **effective cost control – segregation of variable expense allows management to have direct control over them.**
- **preparation of budget estimates for varying levels of output.**
- **ascertaining marginal cost for decision making – allows management to find out additional costs if output is increased, or a new product is added.**

iii) Element-wise classification:

Classification of overheads into

A] indirect material

B] indirect labour

C] indirect expenses.

4. Standing Order Numbers System.

For ease in collection of expenses of similar nature, each of the overhead class is further divided into smaller sub-divisions. This sub-division is provided with a standing order number or syllabus number. Whenever expenses are incurred, they are charged to the appropriate standing order.

The standing orders are identified by

- **♠ numerical,**
- **♠ alphabetical (ad – administration, RFB- repairs to factory building)**
- **♠ alpha - numerical (R-01, for repairs to Building, R-02 Rent)**

code numbers.

Numerical codes can be sequential (01 – admin, 02 – selling) or decimal (1.00 Repairs, 1.01 Repairs Plant, and 1.02 Repairs Buildings)

The standing orders are identified by

♠ Field method or numerical code method –here code has nine digits

first two indicate variable or fixed nature of expense;

next three for head of expense (idle time);

next two stand for analysis of expense

(m/c break down) and

last two for cost center (Lathe)

♠ Combination of symbol and numbers

here maintenance (M) to building (01)is allotted M01 and for maintenance (M) to machines (02)is allotted M02 etc.

5. Treatment of Factory Overheads.

Steps in accounting of overheads :

1. **Expenses incurred by various departments are collected & accumulated by standing orders.**
2. **These are allocated to production & service departments.**
3. **Those that cannot be allocated are apportioned.**
4. **Service department expenses are re-apportioned to production departments.**
5. **With these steps 1. to 4., we get total overheads of production departments.**
6. **Next, an overhead rate is to be compounded for each department on the basis of estimated, actual or normal expenses & normal rate of working.**
7. **Using this rate overheads are charged to different products manufactured in departments.**
8. **Actual overheads are compared with absorbed as above, to find out over/under absorption.**

7. Collection of Overheads.

The documents used to collect overheads –

1. **Stores Requisitions.**
2. **Job Cards or Tickets.**
3. **Invoices or Purchase Vouchers.**
4. **Salary or pay bills.**
5. **Cash Book.**
6. **Subsidiary records.**

8. Allocation & Apportionment of Overheads.

Organization is divided into various departments , each carrying a common activity, for ease in collecting overheads.

Producing departments – manual, machine operations & other processes of producing articles or commodities take place here.

Service departments – service for the benefit of other departments take place here.

Partly producing departments – are service departments that participate in production on a part time basis e.g. Tool Room making tools for the production jobs.

Allocation of overhead - specific overhead cost is charged to cost center or cost unit without splitting.

Apportionment of overhead - distribution of overhead among departments or cost centers on equitable basis as nature of overhead cost is not amenable to direct charge.

Basis for apportioning Overhead Expenses-

Commonly used base	**for items of overhead**
Floor Area	**Rent, rates & taxes**
# of employees	**Canteen, welfare exps.**

Capital value	**Depreciation, insurance**
Direct Labour Hrs.	**Managers' salary, OT exps.**
Horse Power of M/c	**Power**
Weight or volume	**Stores expenses.**

Primary Distribution – Consists of allocation or apportionment of overheads over all (service & production) departments.

Secondary Distribution – Consists of re-apportionment of service department overheads over production departments.

Secondary distribution is carried through –

Service or use method – expenses of service department are distributed at the rate at which its services are used by the production depts.

Analysis or Survey. It is not always possible to measure quantity of service used. Hence overall utilization pattern is surveyed for deciding distribution of overheads.

Ability to pay – higher the revenue of a production dept., greater should be the proportion of service overhead charged to it.

<u>Efficiency or Incentive method</u> – here costs are distributed on the basis of production targets. So if a dept, exceeds its target, the service dept cost charged does not increase, & that is incentive for it

<u>General use of indices</u> – here costs are distributed on the basis of pre-selected index, usually as actual service rendered cannot be measured.

So far overheads of service department were distributed over production depts. But in reality service departments render service to other service departments also, hence overheads need to be charged to these service departments.

This is achieved through what is called methods of re-apportionment or re-distribution.

Methods of re-apportionment or re-distribution.

1. **Direct Distribution Method: here we ignore service by one service dept. to other and distribute service costs to production depts. only.**

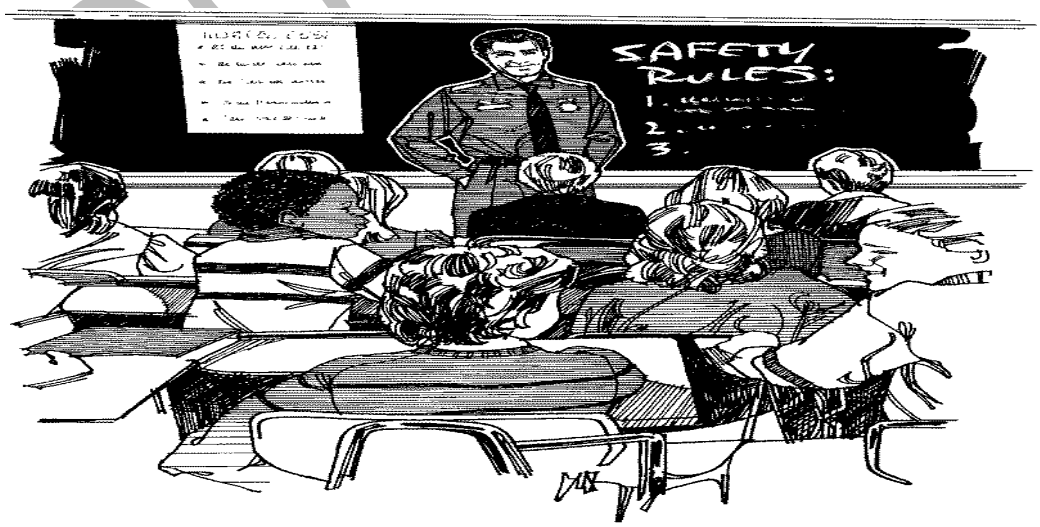
2. **Step Method: Here costs of service dept. serving most production depts. are distributed first. Then the costs of next service department, are distributed. This goes on until last service dept. whose costs are distributed over production depts. only.**

3. **Reciprocal Service Method: recognizes the fact that service departments render service to each other. These inter-departmental services are considered in distribution of overheads by following methods.**

A] Simultaneous Equation Method – The true cost of service departments are calculated first with the help of simultaneous equations. These are distributed over production depts. on the basis of given percentages.

B] Repeated Distribution Method – Under the method costs are distributed per agreed percentages over production & service departments. The process is repeated until service department costs are exhausted or become too small to consider.

C] Trial or Error Method – Under the method costs one service dept. is distributed over another dept. Then the cost of this dept. along with the share of service dept. is re-distributed to the first service dept. This is continued until balancing figure becomes nil.



Next Chapter One Part C, please continue ……

Chapter One (B)

Cost Accounting - An Introduction

Cost Center & Cost Units:

Cost Center

Costs are ascertained by Cost Center, cost unit or both. Cost center means a production or service location, function, activity or item of equipment whose costs may be attributed to cost units.

Cost centers are classified as

<u>Productive</u> - where raw material is converted into saleable products.

<u>Unproductive</u> - where services essential to productive centers are provided

and mixed cost centers which carry both productive & nonproductive activities.

Personal - which consists of a person or a group of persons.

Impersonal - which consists of a department or a piece (or a group) of equipment

Operation - which consists of machine/s and/or person/s carrying out same operation .

Process - which consists of a continuous sequence of operations.

Determination of a suitable cost center is crucial for ascertainment & control of costs.

Cost Units

Cost unit is defined as a unit of product or service in relation to which costs are ascertained.

Some examples :

Industry / product	Cost Unit
Automobile	Number
Cement	Tonne
Transport	Tonne Kilometer
Chemicals	Liter or Kilogram

Cost units are determined after considering following factors.

- **Organization of factory**
- **Conditions of incidence of costs**
- **Requirements of the costing system**
- **Availability of information**
- **Management policy**

Methods of Costing :

Even though fundamentals of ascertaining costs are same in every system, methods of analysis and presentation of costs differ from industry to industry.

There are two principal methods of Costing; namely

Job Costing and Process Costing.

Job Costing.

(i) Job costing method refers to a system of costing in which costs are ascertained in terms of specific jobs or orders which are not comparable with each other. (e.g. printing press, auto garage, ship building). Job costing includes -

(a) contract costing is a method applied where large scale contracts at different sites are carried out.

(b) batch costing – under this method a batch of similar products is considered as a job & cost of this complete batch is ascertained.

(c) terminal costing - under this method the cost is properly terminated at some point and related to a particular job.

(d) operation costing – this method is adopted when it is desired to ascertain the cost of carrying out a certain operation in a department. (e.g. welding)

Process costing.

Where a product passes through distinct stages or processes the output of one process being the input of the next, it is desired to ascertain the cost of each stage or process. This is known as process costing. (e.g. textile, refinery, soaps)

Single-Output costing

Where a single article is produced or services rendered by continuous manufacturing activity, this method is adopted.

The cost of whole production is ascertained and the cost per unit is calculated by dividing the total cost by number of units produced.

Operating costing.

This method is applicable where services are rendered rather than goods produced.

The total expenses of the operation are divided by the units and cost per unit of services is arrived. The method is applied in Railways, electricity companies, hospitals etc.

Multiple or Composting.

This method is for complex products where a single method cannot be applied. Cost of components is calculated by job or process costing and they are aggregated in assembly through use of the single or output costing system. Used in car or airplanes manufacturing, machine tools, sewing machines, bicycles industries

Uniform Costing

This is a name given to a common system of costing followed by a number of firms in the same industry.

Performance of one firm can be easily compared with that of the other.

Department Costing.

When costs are calculated department by department the method is called departmental costing. Within the department, cost is calculated with the help of job costing or unit costing.

All these methods can be used with or without following techniques of costing.

(a) Standard Costing or

(b) Marginal Costing.

Cost Accounting Department.

Cost accounting department has different relations with other departments in each industry. It maintains cost records for manufacturing as well as non-manufacturing departments. Further it analyzes costs of production, marketing and administration. The department closely interacts with Manufacturing, Research & Design, Personnel, Marketing, Public Relations, Legal etc. departments.

Installation of a Costing System.

For a few selected industries, the Central government can, by an order, make installation of a costing system compulsory. However, Most of the firms install costing system for its utility.

Costing system :

- accumulates costs
- assigns them to cost objective

- reports cost information.

The system has to be designed to meet following needs of the organization :-

The objective : can be as simple as ‘ to fix price’. Normally it includes ‘ measure and control efficiency’. For a few industries ‘ to meet legal requirements’ is the objective.

Decision-making points : the levels of management that require cost data for decisions.

Significant operations : greater attention is required for areas accounting for bulk of expenditure.

The system is to be designed to suit the profile of the firm in particular and industry in general.

Please note the firm need not change the method of its operation just to suit the system designed.

Pre-requisites for installation of a costing system.

- **Clear cut authority and responsibility for different individuals.**
- **Full support from management.**
- **Cooperation from staff & workers to generate enthusiasm.**
- **Utilization of all available data from financial books of accounts. If adequate data available, it may not be necessary to have a separate costing department.**

Matters that need proper consideration:

- **Memorandum and articles, organization charts etc. on the executive side.**
- **Financial accounting records current & last audited on accounting side.**

- **The existing forms, registers, documentation on the internal control side.**

- **On technical side several items like factory layouts, purchase procedures, wage payments,**
- **characteristics of products manufactured, cost centers and cost units need due review.**

- **The system should be economic to install & operate, provide accurate reports promptly, capable of controlling costs.**

Accuracy, equity, simplicity, elasticity, comparability, promptness, observance of instructions, periodical results, and reconciliation with financial accounts are some other important matters that deserve close attention.

Organizing a Cost Office

The office preferably be located near the factory for efficient coordination.

Its duties include

3. **Stores accounts: maintain stores ledgers & prepare material abstract.**

4. **Labour accounting: Evaluate time sheets, job cards & prepare labour abstract.**

3. Cost accounts: maintain job process or service accounts.

4. Cost control: Abstract cost control accounts from information.

5. Statistical reports: Prepare special reports for management for investigation & action; and periodical trading statements.

Practical Difficulties in installing a Costing System

- **Lack of support from top management.**
- **Resistance from the existing staff. Change is normally disliked by average employees.**
- **Non-cooperation at other levels of operation.**
- **Shortage of trained staff.**
- **Heavy costs. This is especially true, when the system designed in a manner not suitable to the organization.**

How can these difficulties be overcome?

6. **Obtain firm commitment from the management prior to installation of cost system.**
7. **Impress existing accounting staff about the need to supplement existing system with cost accounting.**
8. **Educate employees regarding benefits of the new system.**

Direct Expenses & Overheads.

1. Direct Expenses

Meaning, Importance & control.

Direct expenses are capable of being directly charged to the job. They form part of Prime Cost. They include costs, other than materials or wages which are incurred for a specific product or saleable service.

Royalties charged per unit, hire charges for a specific job, sub-contract work of a job, sales commission per unit sold, Freight, traveling etc for a particular job, cost of making a design or a pattern for a job are all examples of direct expenses.

These are directly debited to Direct Expense a/c & accounted against a job.

Items under this head are few & generally controlled by fixing standards and investigating variations.

2. Indirect Expenses.

Indirect Expenses are the expenses that cannot be conveniently, directly and wholly allocated to cost centers or cost units.

Examples – rent, rates and insurance of factory & office.

Depreciation, repairs & maintenance of machinery, equipment, furniture.

Power, fuel, lighting of factory and office.

Advertising, legal charges, audit fees, bad debts.

Certain exclusions from costs:

Matters of finance like interest, dividend on investment, profit or loss on sale of company assets, transfer fees etc. do not form a part of costs. Similarly, appropriation of profits, income tax , transfer to sinking fund are not cost items.

On the other hand, costs include notional cost in the form of rent for factory premises owned by the firm.

3. Overheads – Meaning

Overheads is sum of the cost of indirect material, indirect labour and such other expenses, including services, as cannot be conveniently charged direct to a specific cost centers or cost units.

In modern times overheads assume significant proportion of total cost.

They are to be estimated for allocating on a continuous basis to cost centers and cost units. Allocation is carried using estimated basis for allocation. These factors emphasize importance of proper accounting for overheads.

4. Classification of Overheads

The process of classification involves

- **determination of classes for grouping expenses**
- **grouping expenses in those classes.**

Classification of overheads depends upon

- **size & type of business**
- **nature of product or service rendered**

Basis for classification

iv) Function-wise
v) Behaviour-wise
vi) Element-wise

ii) Function-wise classification –

A] Manufacturing or production overheads: is a sum of indirect material, labour and expense incurred for operation of manufacturing or production division.

B] Administrative overheads: are costs of general management, secretarial, accounting and administrative services which cannot be directly related to production, marketing or research & development functions.

C] Selling & Distribution overheads: Selling overheads is the cost of seeking to create & stimulate demand and of securing orders. Distribution overhead is the expenditure incurred in the process which begins with

making the packed products ready for dispatch and ends with making the reconditioned returned empty package, if any, available for re-use.

ii) Behaviour-wise classification:

A] Fixed overheads: are those which remain fixed in total amount with increases or decreases in volume of output or productive activity for a particular period of time.

They are, therefore, generally considered to be uncontrollable for specified period.

B] Variable overheads: are those costs which vary in total, in direct proportion, to the volume of output. Variable overhead changes in total but its incidence remains constant per unit

C] Semi-Variable overheads: are fixed and partly variable. Normally they remain unchanged for a certain activity level and changes usually by fixed amount every time that level is crossed.

Classification of overheads into fixed & variable offers advantages for

- **effective cost control – segregation of variable expense allows management to have direct control over them.**

- **preparation of budget estimates for varying levels of output.**

- **ascertaining marginal cost for decision making – allows management to find out additional costs if output is increased, or a new product is added.**

iii) Element-wise classification:

Classification of overheads into

A] indirect material

B] indirect labour

C] indirect expenses.

9. Standing Order Numbers System.

For ease in collection of expenses of similar nature, each of the overhead class is further divided into smaller sub-divisions. This sub-division is provided with a standing order number or syllabus number. Whenever expenses are incurred, they are charged to the appropriate standing order.

The standing orders are identified by

- **♠ numerical,**
- **♠ alphabetical (ad – administration, RFB- repairs to factory building)**
- **♠ alpha - numerical (R-01, for repairs to Building, R-02 Rent)**

code numbers.

Numerical codes can be sequential (01 – admin, 02 – selling) or decimal (1.00 Repairs, 1.01 Repairs Plant, and 1.02 Repairs Buildings)

The standing orders are identified by

♠ Field method or numerical code method –here code has nine digits

- **first two indicate variable or fixed nature of expense;**
- **next three for head of expense (idle time);**

next two stand for analysis of expense

(m/c break down) and

last two for cost center (Lathe)

♠ Combination of symbol and numbers

here maintenance (M) to building (01)is allotted M01 and for maintenance (M) to machines (02)is allotted M02 etc.

10.Treatment of Factory Overheads.

Steps in accounting of overheads :

9. **Expenses incurred by various departments are collected & accumulated by standing orders.**
10. **These are allocated to production & service departments.**
11. **Those that cannot be allocated are apportioned.**
12. **Service department expenses are re-apportioned to production departments.**
13. **With these steps 1. to 4., we get total overheads of production departments.**
14. **Next, an overhead rate is to be compounded for each department on the basis of estimated, actual or normal expenses & normal rate of working.**
15. **Using this rate overheads are charged to different products manufactured in departments.**
16. **Actual overheads are compared with absorbed as above, to find out over/under absorption.**

7. Collection of Overheads.

The documents used to collect overheads –

7. **Stores Requisitions.**
8. **Job Cards or Tickets.**
9. **Invoices or Purchase Vouchers.**
10. **Salary or pay bills.**
11. **Cash Book.**
12. **Subsidiary records.**

8. Allocation & Apportionment of Overheads.

Organization is divided into various departments , each carrying a common activity, for ease in collecting overheads.

Producing departments – manual, machine operations & other processes of producing articles or commodities take place here.

Service departments – service for the benefit of other departments take place here.

Partly producing departments – are service departments that participate in production on a part time basis e.g. Tool Room making tools for the production jobs.

Allocation of overhead - specific overhead cost is charged to cost center or cost unit without splitting.

Apportionment of overhead - distribution of overhead among departments or cost centers on equitable basis as nature of overhead cost is not amenable to direct charge.

Basis for apportioning Overhead Expenses-

Commonly used base	**for items of overhead**
Floor Area	**Rent, rates & taxes**
# of employees	**Canteen, welfare exps.**
Capital value	**Depreciation, insurance**
Direct Labour Hrs.	**Managers' salary, OT exps.**
Horse Power of M/c	**Power**
Weight or volume	**Stores expenses.**

Primary Distribution – Consists of allocation or apportionment of overheads over all (service & production) departments.

Secondary Distribution – Consists of re-apportionment of service department overheads over production departments.

Secondary distribution is carried through –

Service or use method – expenses of service department are distributed at the rate at which its services are used by the production depts.

Analysis or Survey. It is not always possible to measure quantity of service used. Hence overall utilization pattern is surveyed for deciding distribution of overheads.

Ability to pay – higher the revenue of a production dept., greater should be the proportion of service overhead charged to it.

Efficiency or Incentive method – here costs are distributed on the basis of production targets. So if a dept, exceeds its target, the service dept cost charged does not increase, & that is incentive for it

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departments also, hence overheads need to be charged to these service departments.

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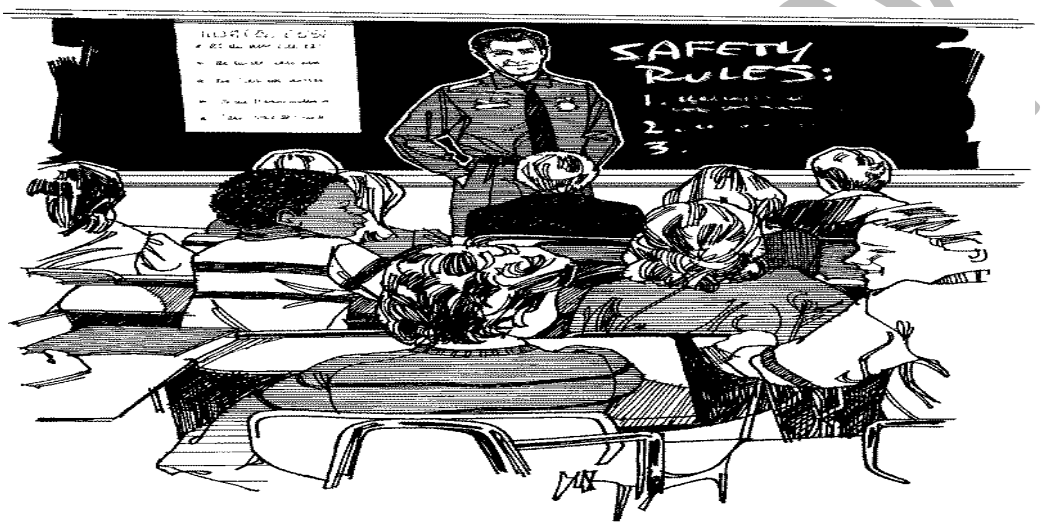

Next Chapter One Part C, please continue ……

Summary

Chapter One (C)

Cost Accounting - An Introduction

9. Absorption of Overheads :

Absorption of overheads refers to charging of overheads to individual products or jobs. 'Overhead rate' of expenses is used for absorption.

The rate is determined by

- **Use actual overhead rate of the previous year / period & apply it on current production.**
- **Estimating expenses for the current year and applying to anticipated volume of production.**
- **Base overheads on normal volume of output or capacity**

The actual overhead rate of expenses :

The rate is arrived at by dividing actual expenses by actual value/ volume of the base.

Limitations :

☻**Rate can be decided only after the end of period when actual data is available.**

☻**Seasonal fluctuations cause wide variations in cost & activity hence consistent data is not available.**

☻**The rate based on actuals is very useful only for comparison with pre-determined norms or standards.**

The predetermined overhead rate of expenses:

The rate is arrived at, by dividing budgeted expenses by budgeted base for the period.

Advantages :

☻ **Costs can be determined on immediately after completion of production.**

☻**Assists budgetary control as data is readily available.**

☻The rate is useful for price determination in cost plus contracts.

The blanket overhead rate of expenses:

This rate is arrived by dividing overhead expenses of entire factory by selected base for the period.

Uses :

☻Where one major product is produced in a continuous process in the factory.

☻Where all products pass through all departments &

☻Where all of them are processed in the department for same length of time.

The multiple overhead rates of expenses:

In this case, separate rates are calculated for each department; cost center, each product etc. The rates are arrived at by dividing overhead expenses of the cost center by corresponding base.

10. Method of Absorbing Production Overheads :

Requirements of a good method :

Major requirement of a good method for absorption of overheads is that overhead costs incurred are fully recovered ; and there is no material over/under recovery.

Secondly, costs are charged equitably by recognizing

a) time spent

b) skills of workers utilized

c) manual or automated operation.

as these factors influence the quantum of overhead expense.

The selected method should be capable of being used in a convenient manner. It should yield uniform results, and changes in costs must be due to underlying changes e.g. more/less time spent, defective machine or process etc.

Following different Methods of Absorbing Production Overheads are available.

1. Percentage of direct material cost

2. Percentage of prime cost

3. Percentage of direct labour cost

4. Direct labour hour rate

5. Machine hour rate

6. Combined machine and labour hour rate

7. Rate per unit of production.

1. Percentage of direct material cost:

Here overhead rate is calculated by dividing factory overheads by direct material cost expressed as a percentage.

The method provides satisfactory results when following conditions are fulfilled.

- **Proportion of overheads to the total cost is significant.**

- ♠ **Prices of materials are stable over a period.**
- ♠ **Output is of uniform nature.**

The method offers following advantages:

♠ Simple to use as direct material cost is easily available.

♠ Overheads related to materials are equitably accounted.

♠ Suitable when material prices are stable.

2. Percentage of prime cost:

In this method actual or predetermined overhead rate is calculated by dividing factory overheads by prime cost expressed as a percentage.

It is simple to operate. It is applied because it considers both labour and material.

Above two methods, however, are considered unsuitable due to reasons below.

i. While manufacturing overheads are a function of time, above methods ignore time spent.

ii. Overhead expenses do not have any direct relation with direct material or prime cost.

iii. If material prices are not stable overheads charged to a same job will fluctuate widely.

iv. Difference in skills of labour required from job to job, or the fact whether production is carried by men or machines is ignored.

3. Percentage of direct labour cost:

The rate is calculated by dividing total overhead expense by labour cost expressed as a percentage.

Both expenses & labour cost can be predetermined, actual or normal.

The method offers following advantages:

♠ Simple to use as direct labour cost is easily available.

♠ Overheads related to workers are equitably accounted.

♠ Large over/under absorption is not possible.

♠ Complexities in fixing and applying labour or machine hour rate are avoided.

The method suffers from following Limitations :

♠ **Fails to recognize the time element directly.**

♠ **Where machines are used for production, this method does not account expenses equitably.**

4 Direct labour hour rate:

The method is admirably suited to operations that do not involve any large use of machines. The rate is calculated by dividing overhead expenses by labour hours. Both expenses & labour hours can be predetermined, actual or normal.

This method is very popular as it recognizes the time factor fully.

5. Machine hour rate:

The rate is calculated by dividing expenses by machine hours. Like labour hour rate this method recognizes time factor.

♠ **Suitable for operations where machines predominate and operators play a passive part**

♠ **Machine hour rate is usually predetermined.**

♠ **Can be one common rate for all operations or fixed for each (group of) machine.**

The method offers following advantages:

i) **Where machinery is the main factor in production this method distributes expenses equitably.**
ii) **Under absorption of overheads indicates idle time of machines.**
iii) **Particularly suitable when one operator works on several machines or several operators work on a single machine.**
iv) **Takes time factor into consideration.**

The method suffers from following disadvantages :

i) **Additional data regarding operating time of machinery is required.**
ii) **Computation & use of individual machine hour rates is complicated.**
iii) **Distribution is not realistic when labour is also an important factor in production.**

6. Combined machine and labour hour rate:

All expenses related to machines can be absorbed using machine hour rate, in which case other common expenses and those related to workers can be absorbed using labour our rate.

7. Rate per unit of production.

If operations consist of producing a single product, overheads can be absorbed by this method. Predetermined or normal expenses and production units are used to calculate the rate.

11. Over or Under Absorption of Overheads:

After application of predetermined overhead rate, amount of actual expenses seldom matches with the amount of actual expenses. If actual expenses are more than applied expenses, there is under absorption of overheads and *vice versa.* Over/under absorption of overheads is also known as over/under recovery or overhead variance.

Treatment of under/over absorbed overheads -

Use of supplementary rate is recommended if the amounts of variance are large. This rate is used to absorb overheads again and correct the variance caused by application of the main rate.

If variance is not large or material it is not charged to cost but transferred to profit & loss a/c of the period.

In exceptional circumstances where the normal business cycle is of more than one year, or in case of new product introduction, variance is transferred to a reserve account for absorption in the following year.

12. Treatment of Administrative Overheads:

Administrative expenses by their very nature, bear only remote relationship with either production or selling activities. They are mostly period costs & do not vary with change in volumes of output or sale. Accounting treatment accorded to them can take any one of the following forms :

♠ apportion between production and selling overheads. They get merged with production & sales overheads.

♠ transfer to profit & loss a/c. This treatment recognizes the fact that these expenses do not bear relation to manufacturing or selling activities.

♠ treat these overheads as a separate addition to cost of jobs or product. In this case, addition calculated using base of

- works cost

- sales value/quantity

- gross profit on sales

- units manufactured.

- conversion cost

13. Treatment of Selling & Distribution Overheads:

Even though these overheads represent two distinct functions, for accounting purposes they are clubbed & apportioned based on

i) percentage of works cost.

ii) percentage on the selling price

iii) an estimated rate per unit

14. Overheads Costs & Management Problems.

Firms aim at maximizing profits by increasing sales & reducing costs. Increase in margins of sales in either case is dependent on the extent to which overheads remain unchanged.

Some events demand review and reassessment of overheads to find out their impact on profits. These are

i) enforced idle capacity.

ii) increased range of products.

iii) extended sales territories; and

iv) expansion (or contraction) in business.

15. Control of Overheads:

Manufacturing Overheads –

Control over these overheads is achieved through *flexible budgets* which allow comparison of actual overheads with budgeted expenses for different levels of output. The differences are analyzed to eliminate causes of such differences.

Flexible budgets can be prepared by a) range of activity or b) fixed plus variable rate methods.

If overheads are budgeted department wise their control and accountability is further facilitated.

Alternatively non controllable overheads are identified and excluded and balance items compared with budgets to determine, analyze and prevent variances.

Approved departures from budgets are defined and only variance beyond these limits is reported for action.

Difficulties in controlling overhead costs:

- **When authority is delegated to lower levels fewer expenses are controllable by them.**
- **Expenses are accounted for by more than one person/authority.**
- **Controllable overheads vary with production and are constant per unit.**
- **Most overheads are result of a management decision having long term impact.**

Administration Overheads –

These expenses are fixed by nature and are incurred as a result of management policy.

Hence they cannot be controlled easily.

Control reports can be prepared to compare actual cost with

actual of previous period or

budgeted cost or

standard cost for the period,

for required management action.

Selling and Distribution Overheads –

These costs do not have direct relation with output. If sales are low, more costs need to be incurred to fight competition and increase demand. If sales are high and match with output at full capacity, lesser costs can be incurred.

Control reports can be prepared to compare actual cost with

actual of previous period or

budgeted cost or

standard cost for the period,

for required management action.

16. Determination of Cost:

Costs are generally built in four stages as under –

i) Prime Cost ii) Works or Factory Cost
ii) Cost of Production and
iv) Total Cost or Cost of Sales.

Some equations:

i) Prime Cost = Direct material + Direct Labour.

ii) Works Cost = Prime Cost + Factory Overheads.

iii) Cost of Production = Works Cost Office & Admin Overheads.

iv) Total Cost or Cost of Sales (CoS) = Cost of Production + Selling & Distribution Overheads.

It is to be noted that

CoS + Profit = Selling Price; or

Profit = Selling Price – CoS.

17. Cost Sheet:

Cost sheet is a statement of costing information.

Normally, it provides details of actual total cost, cost per unit, and corresponding cost per unit in the previous period for all items of expenses along with % of each expense to total unit cost.

Subtotals are provided to show prime cost, works cost, production cost, cost of sales etc.

A typical format of a cost sheet:

Particulars	Total Cost	Cost / Unit	% of	Cost/Unit	Total	Cost Previous Period
Op Stock						
+ Purchases						
- Cl stock						
= Direct Material						
+ Direct Labour						
= Prime Cost						
+ Factory Overheads						
= Works Cost						
+ Office Overheads						
= Cost of Production						
+ Selling/Distribution Overheads						
= Cost of Sales						