Chapter 1

Material Cost

Objectives of Material Control System: The function of ensuring that sufficient goods are retained in stock to meet all requirements without carrying unnecessarily large stocks.

a) To make continuous availability of materials.
b) To purchase requisite quantity of materials to avoid locking up of working capital
c) To make purchase competitively and wisely at the most economical prices
d) To purchase proper quality of materials to have minimum possible wastage

"EOQ" and the assumptions used in computing EOQ.

EOQ is a quantity of materials to be ordered. It is an optimum size of a purchase order that minimizes total annual holding and ordering costs of inventory. The major objective of managing inventory is to discover and maintain the optimum level of investment in inventory. The optimum level will be that quantity which minimizes the total costs associated with inventory. The optimum size of the order for an item is known as the EOQ.

Assumptions used in EOQ:

a) Ordering cost per order and Carrying cost per unit per annum is known and they are fixed.
b) The anticipated usage of raw materials should be pre-determined in advance.
c) Cost per unit of raw material should be Constant. (No inflation/deflation)
d) The quantity of raw materials ordered is received immediately (i.e., lead time is zero).

Economic Order Quantity: (EOQ)- The total costs of a material usually consist of **"Buying Cost + Total Ordering Cost + Total Carrying Cost"**. Economic Order Quantity is 'The size of the order for which both ordering and carrying cost are minimum'.

Buying Cost or Purchase Cost: Amount paid to the supplier for the goods.

Ordering Cost : The costs which are associated with the ordering of material. It includes cost of staff posted for ordering of goods, expenses incurred on transportation, inspection expenses of incoming material etc.

Carrying Cost : The costs for holding the inventories. It includes the cost of capital invested in inventories. Cost of storage, Insurance. It is also called as Opportunity cost, Holding cost, Stock holding cost, Bank rate of interest, FD rate, return on investment etc. If all these costs are given separately (Like Holding cost 6%, Interest 4%, insurance 3%, then add all of them. Consider 13% while solving the problem)

Valuation of Material receipts-

As per CAS-6 on Material Cost,

Following items can be included as part of the cost:

Road Tax, Transit insurance, Toll charges paid to get the material till ware house, Custom duty on imported goods, all non-refundable taxes, fright inward, parcel charges, cost of containers (if non-returnable), commission, brokerage paid on purchases.

Items to be deducted from cost calculation:

Trade discount or Quantity discount, subsidy, grants, incentives.

Note 1 – Cash discount should not be deducted

Note 2 - If there is no information on whether a tax is recoverable (refundable) or not, then assume it as recoverable and give a note. GST is a recoverable tax, hence not to be considered as part of cost.

Note 3 – Any form of fine, penalty, demurrage & detention charges must be excluded. They are abnormal costs in nature.

Note 4 – Even if the amount is paid by Supplier, it should still be included in the cost calculation, as buyer is ultimately going to pay for it.

Inventory ratios

Inventory Turnover Ratio: Inventory Turnover: Inventory Turnover signifies a ratio of the value of materials consumed during a given period to the average level of inventory held during that period. The ratio is worked out on the basis of the following formula:

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of goods sold OR Sale}}{\text{Average Inventory OR Closing Inventory}}$$

The purpose of the above ratio is to ascertain the speed of movement of a particular item. A high ratio indicates that the item is moving fast with a minimum investment involved at any point of time. On the other hand a low ratio indicates the slow moving item.

ABC Analysis

It is a system of inventory control which exercises discriminating control over different items of stores classified on the basis of the investment involved. Usually the items are divided into three categories according to their importance, namely, their value and frequency of replenishment during a period.

1. A Category of items consist of only a small percentage i.e., about 10% of the total items handled by the stores but require heavy investment about 70% of inventory value, because of their high prices and heavy requirement.
2. B Category of items are relatively less important; they maybe 20 % of the total items of material handled by stores. The percentage of investment required is about 20 % of the total investment in inventories.
3. C Category of items does not require much investment; it may be about 10% of total inventory value but they are nearly 70 % of the total items handled by store.

A Category of items can be controlled effectively by using a regular system which ensures neither over – stocking nor shortage of materials for production. Such a system plans its total material requirements by making budgets. The stocks of materials are controlled by fixing certain levels like maximum level, minimum level and re-order level. A reduction in inventory management costs is achieved by determining economic order quantities after taking into account ordering cost and carrying cost. To avoid shortage and to minimize heavy investment in inventories, the techniques of value analysis, variety reduction, standardization etc., maybe used.

In the case of B category of items, as the sum involved is moderate, the same degree of control as applied in A category of items is not warranted. The orders for the items, belonging to this category may be placed after reviewing their situation periodically.

For C category of items, there is no need of exercising constant control. Orders for items in this group maybe placed either after six months or once in a year, after ascertaining consumption requirements. In this case the objective is to economies on ordering and handling costs.

Advantages of ABC analysis:

a) It ensures that, without there being any danger of interruption of production for want of materials or stores, minimum investment will be made on inventories of stocks of materials or stocks to be carried.
b) The cost of placing orders, receiving goods and maintaining stocks is minimized especially if the system is coupled with the determination of proper economic order quantities.

c) Management time is saved since attention need be paid only to some of the items rather than all the items as would be the case if the ABC system was not in operation.
d) With the introduction of the ABC system, much of the work connected with purchases can be systematized on a routine basis to be handled by sub - ordinate staff.

Just in Time purchase

Just in time purchase means the purchase of goods or materials such that delivery immediately precedes their use. In other words purchase order will be placed only when the production department is in requirement of raw materials.

Advantages **of JIT purchases:**

1) The suppliers of goods or materials co – operates with the company and supply requisite quantity of goods or materials for which order is placed before the start of production.
2) JIT purchases results in Cost Savings, for example, the costs of stock out, inventory carrying, materials handling and breakage are reduced.
3) Due to frequent purchases of raw materials, it's "Issue price is likely to be very close to the replacement price". Consequently the method of pricing to be followed for valuing material issues becomes less important for companies using JIT purchasing.
4) JIT purchasing are now attempting to extend daily deliveries to as many areas as possible so that goods spend less time in warehouses or on store shelves before they are exhausted.

Valuation of material issues

Perpetual Inventory System: Perpetual Inventory is a system in which a continuous record of receipt and issue of materials is maintained by the stores department. In this system the stock control cards, bin cards and stores ledger show the receipts, issue and balance of each item at any point of times after each transaction. The stocks as per dual records namely bin card and stores ledger are reconciled on a continuous basis. The system facilitates planning and control.

"Advantages" of Perpetual Inventory System:

1) This system facilitates production planning and inventory control.
2) It avoids the necessity of stock taking by actual count at the end of financial period.
3) It helps in having a detailed and more reliable check on the stocks.
4) Stock records are more reliable and stock discrepancies and investigated

Continuous Stock Taking

Continuous Stock taking is a system of PHYSICAL VERIFICATION of stocks of each item on continuous stock of each item on continuous basis. The actual quantity in the bin card is compared with bin balances. Such verification is conducted round the year such that all items of stocks are verified 3 to 4 times in a year. Any discrepancies are investigated and Reported for corrective action. It also serves as a moral check on stores staff and acts as deterrent to dishonesty.

"Advantages" of Continuous Stock Taking:

1) Any discrepancies, irregularities or changes are detected at every stage and bought to the notice of management.
2) It acts as a moral check on stores staff and acts as a deterrent to dishonesty.
3) The disruption in production caused by periodic stock taking is eliminated.
4) Control over stock is improved by eliminating over stocking or running out of stock.

Bin Card:

a) A Bin Card is a QUANTITATIVE RECORD of receipts, issues and closing balances of items of stores.
b) Each item is accompanied by a separate bin Card. The bin card is posted as and when a transaction takes place.
c) Only after the transaction is recorded, the items are received /issued.
d) On receipt of materials, the quantity is entered in the bin card from the goods received note in the receipt column and the issues to various departments in the issue column. The balance quantity is calculated and recorded.
e) The various levels indicated in a bin card enable the storekeeper to requisition of material as and when required.

Stores ledger:

a) The Stores Ledger is maintained to record all receipt and issue transactions in respect of materials.
b) The QUANTITIES and the VALUES are entered in the receipts, issues and balance columns.
c) Additional information regarding quantity on order and quantity reserved may be recorded.
d) Separate sheets for each item or continuous stores ledger may be maintained. The sheets should be serially numbered to obviate the risk of removal or loss.

Two Bin card system

Under this system each bin is divided into two parts namely- smaller part & larger part. Smaller part is recorded with the quantity equal to the minimum stock or even the re - ordering level. The larger part to record the remaining quantity. Issues are made out of the larger part first; but as soon as it becomes necessary to use quantity out of the smaller part of the bin, fresh order is placed. Two Bin System is supplemental to the record of respective quantities on the bin card and the stores ledger card.

Accounting treatment of "WASTE" in cost accounts

Waste is a "Material loss during production or storage" due to evaporation, chemical reaction, unrecoverable residue shrinkage etc., and Wastage maybe visible or invisible wastage. Wastage maybe normal waste incidental to manufacturing activities or abnormal waste which is in excess of material loss over the normal losses. Necessary steps should be taken to minimize abnormal waste. Such waste has no recovery value.

For accounting purpose, waste may be classified into normal waste and abnormal waste:

Normal Waste: Normal waste being a normal feature and arising in a process or operation usually through standard set for the normal percentage of visible and invisible wastes that may be anticipated to arise in various manufacturing process or operation. Therefore normal waste should be regarded as part of the production cost. The good units in the process should absorb the cost of waste.

Abnormal Waste: It is in excess of the standard percentage of wastage setup to account for the normal wastage. The cost of abnormal waste should be excluded from the total cost and charged to costing profit and loss account.

Documents related to "material management"

Material Requisition: It is also called as Stores Requisition Note. When production or other departments requires material from the stores it raises a requisition, which is an order on the stores for the material required for execution of the work order. This note is signed by the department in charge of the concerned department. It is a document which authorizes the issue of a specified quantity of materials.

Purchase Requisition: The manager in-charge of purchase department should obtain requisition from the stores in charge, departmental head of similar person requiring goods before placing orders on suppliers. If the present stock run down to the reorder level, then the stores department sends a purchase requisition to purchase department, authorizing the department to order further stock.

Purchase Order: If the purchase requisition Received by the purchasing department is in order, then it will call for tenders and /or quotations from the suppliers of materials. It will send enquiries to prospective suppliers giving details of requirement and requesting details of available materials, prices, terms and delivery etc. Quotations will then be compared and will place order with those suppliers who will provide the necessary goods at competitive prices.

Chapter 2

Labour Cost

Labour Turnover

It is the change in the labour force during a specified period measured against a suitable index. The rate of Labour Turnover in an industry depends upon several factors such as, nature of the industry, its size, location and composition of the labour force.

A controlled level of Labour Turnover is considered desirable because it helps the firm to adjust the size of its labour force in response to needs such as for seasonal changes or changes in technology.

Causes of Labour Turnovers:

(i) **Personnel Causes**: Dislike for the job, locality or environment, domestic troubles and family responsibilities, change of line for betterment, retirement due to old age and ill health or Death.

(ii) **Unavoidable Causes**: Retrenchment due to seasonal trade, shortage of any material and other resources, slack market for the product, Discharge on disciplinary grounds.

(iii) **Avoidable Causes**: (a) Unsuitability of job. (b) Low pay and allowance. (c) Unsatisfactory working conditions. (d) Unhappy relations with co-workers and unsatisfactory behavior of superiors. (e) Dispute between rival trade unions. (f) Lack of transport, accommodation, medical and other factors.

Effects of High Labour Turnover

- ✓ Difficulty in day today execution of work
- ✓ Challenges in production planning
- ✓ Reduced overall efficiency
- ✓ Recruitment cost
- ✓ Training Cost

Measurement of Labour Turnover:

(A) **Separation Method:** In this method, we consider number of employees left during the period. This includes "Employees Resigned and Employees discharged (Asked to leave)". In simple, all those going out of the company.

$$\text{Labour Turnover Rate} = \frac{\text{Number of separations}}{\text{Average number of workers}} \times 100$$

(B) **Replacement Method:** In this method, we consider actual replacement made. Replacements are made to fill the vacancy created by separation. However, number of separation need not be equal to number of replacement. It is important to note that new employees hired on account of expansion plans should not be considered here (Because in real sense, they are not "replacements").

$$\text{Labour Turnover Rate} = \frac{\text{Number of replacements}}{\text{Average number of workers}} \times 100$$

(C) **Flux Method:** Under this method Labour Turnover is computed by taking into consideration the separations, replacement and new joinees. Computation is done as per the following formula.

$$\text{LTR} = \frac{\text{(Number of separations + Number of replacements + New joinees)}}{\text{Average number of workers}} \times 100$$

Equivalent (Annualized) Employee Turnover Rate = (Employee Turnover Rate/No. of Days) * 365. Equivalent (Annualized) Employee Turnover Rate is calculated to equate monthly/quarterly ETR to annual ETR.

Overtime

This is the time for which the worker works "**beyond**" the normal hours. Generally, workers are paid for the rate **higher** than the normal rate. Overtime work involves extra cost and should be resorted to only when extremely essential. Occasional overtime is a healthy sign since it indicates that the firm has the optimum capacity and that the capacity is being fully utilized. But persistent overtime is rather a bad sign because it may indicate either:

a) That the firm needs larger capacity in men and machines, **or**
b) That men have got into the habit of postponing their ordinary work towards the evening so that they can earn extra money in the form of overtime wages.

As per Factories Act, 1948 overtime wage will be two times of the normal wage. A worker will be eligible for overtime payment if he works for

a) More than 9 Hours a day OR
b) More than 48 Hours a week.
   Wage for this purpose is Basic + all allowances.

Treatment of OVER TIME:

Overtime payment is the amount of wages paid for working beyond normal working hours. The rate for overtime work is higher than the normal time rate; usually it is at DOUBLE the normal rates.

The treatment of overtime cost depends upon the **circumstances** under which it arises. The following treatment will be given to the overtime cost in the following circumstances:

1) Where the **customers** agree to bear the entire charge of overtime due to urgency of work, it should be charged **direct** to the **Job** (or) **Work Order** concerned.
2) When overtime work is required to make up any **shortfall** in production due to some fault of management (or) some unexpected development, it should be charged to **Costing P&L Account**.
3) Overtime required because of some **abnormal conditions** like floods, earthquakes, etc., should be charged to **Costing Profit & Loss Account**.

Idle time

When workers are paid on TIME BASIS, some difference is likely to arise between the time for which they are paid (Called Time Keeping) and the time they actually spend upon production (Called Time Booking). i.e., some time is lost between factory gate and place of work; some time is required for tool adjustment, machine setting, etc.. Such time cannot be booked for any particular job and workers are paid for this time also. Such time of the difference between the two times, i.e., for which they are paid (Time keeping) and which they actually spend on the job (Time booking) is known as **"Idle Time"**. **Idle time = Time keeping – Time booking.**

Idle time may be defined as that time for which **wages are paid, but no production is obtained.**

Accounting treatment for Idle time - Normal and Abnormal idle time.

a) **Normal Idle Time:** It refers to that loss of time which is generally unavoidable and is bound to arise. **Example**, Time spent in setting the machines, adjusting the tools, moving from one job to another, tea breaks (if necessary), personal needs, etc. It will be seen that this wastage of time is of such a nature that it cannot be avoided and its cost is, therefore, an expense which the employer must bear.

b) **Abnormal Idle Time : -** Where, due to some causes in no way connected with the usual routine of manufacture, time is lost for which employer must pay, the time wasted represents abnormal idle time. It is mostly avoidable particularly when it is attributable to inefficiency or defective planning. Examples of abnormal idle time are machinery breakdown, power failure, strikes, and delay in material supply, etc. Cost of abnormal idle time should be collected separately and written off to Costing Profit & Loss Account. It cannot be regarded as a cost of production.

Requisites of a good time-keeping system:

1. It should not allow proxy for another worker under any circumstances.
2. There should also be a provision of recording of time of piece workers so that regular attendance and discipline may be maintained. This is necessary to maintain uniformity of flow of production.
3. Time of arrival as well as time of departure of workers should be recorded so that total time of workers may be recorded any wages may be calculated accordingly.
4. As far as possible, method of recording of time should be mechanical so that chances of disputes regarding time may not arise between workers and the time-keeper.

Chapter 3

Overheads

Overhead Estimation:

1st Method – Percentage Basis:

In the absence of detailed information, the easiest way to estimate overheads will be on the basis of percentage relationship as below:

Factory Overhead	As a Percentage of Direct wages
Office & Admin Overhead	As a Percentage of Net Works cost
Selling & Distribution Overheard	As a Percentage of Cost of Goods Sold

Some companies may choose to calculate Overhead as a percentage of Prime Cost, as a percentage of material etc. However the 3 percentages given in above table is most commonly used.

2nd Method – Hourly Rate basis (Machine Hour Rate & Labour Hour Rate)

Under this method, overheads are estimated on the basis of Machine Hour or Labour Hour.

Here, we draw a relationship between Overhead and Time.

What's the reason? - Percentage method assumes that a mere increase in salary per employee will result in increase in overhead also. However, in reality, just because there is an increase in a labor's wage, it doesn't necessarily mean that there should be increase in overheads also. Hence the 2nd method believes that "Time" is the key factor that drives the overheads.

Under this method, Time is considered as the basis for overhead estimation. Hence it is called "Hourly Rate Method".

Manufacturing entities where machine is the predominant factor driving their cost uses Machine Hour Rate. (MHR)

Service Industry, where labour/employees is the main driving factor of the cost uses Labour Hour Rate. (LHR)

$$\text{Machine Hour Rate} = \frac{\text{Total Overheads}}{\text{Effective Machine Hours}}$$

$$\text{Labour Hour Rate} = \frac{\text{Total Overheads}}{\text{Effective Total labour Hours}}$$

3rd Method – Departmental Hourly Rate basis

Under this method also, overheads are estimated on the basis of Machine Hour or Labour Hour. However, we calculate overheads NOT for a Company as a whole (like what we did in 2nd method), but one department at a time.

What's the reason? – Though a company is into manufacturing, it doesn't mean every department in the company is machine driven. Example – Cutting, Welding, Machining departments may use machine more than labour, But Packing & dispatching department uses more labour resources than Machine. Therefore, this method suggests us the calculate overheads based on machine hours only in those departments where machine is predominant and use labour hours where labour is predominant. Cutting, welding department shall use MHR, whereas Packing & dispatching department should use LHR.

In simple, from ONE RATE FOR THE WHOLE COMPANY IN 2ND MEHTOD, we are shifting to ONE RATE FOR EACH DEPARTMRNT IN 3RD METHOD. For this, we must calculate overheads for each department. Some overheads are specific to a department (Repairs). But some overheads (like rent) are common to all departments. We need to distribute them using a logical base.

$$\text{Overhead rate} = \frac{\text{Overheads related to a department}}{\text{Machine Hrs or Labour Hrs of that department}}$$

Primary Distribution

As we need to now calculate overhead rate for each department separately, it is necessary to first calculate overheads for each department. Some overheads are specific to a department. Ex: Repairs of machine in Department 'A'. or Depreciation of a machine used only in Department 'B'.

But there are lot of overheads which are not specific for a department like factory rent, electricity bill. Now these expenses are to be shared between Department A & B using a logical base. Example – Rent can be distributed on the basis of area occupied.

So – There are few expenses that are specific to a department. That cost is "Allocated" to that department only. And, there are few expenses that are to be shared between multiple departments. Such items are "Apportioned".

Allocation & Apportionment together is called "Primary Distribution".

***Note** – For every overhead to be apportioned, we need to identify a logical base. If there is no clear data related to such base, then the overhead should be apportioned on Direct Wage basis.*

Secondary Distribution

Now that we have understood primary distribution, next thing is to learn secondary distribution. We must know that there are some departments in a company that are performing revenue generating activities. They are called "Production departments". But we must also know that not every department in a company is capable of generating revenue on its own. Example – Canteen department in a Textile Factory. Main objective of a canteen in a textile factory is not to generate revenue to the factory. Its objective is to serve food to factory employees. Such departments are called "Service Departments". They are mainly into supporting the production departments.

- Production department & Service department both have costs.
- But only Production department can generate revenue.

Service departments are only to support production departments. Hence cost of Service department should be absorbed by (Or Transferred back to) Production departments. Such process of transferring back service dept. cost to production dept. is called "Secondary distribution".

Note – Anything incurred in Service department has to be transferred back to production department regardless of whether it is Direct cost (Prime cost) or Indirect Cost (Overheads).

4th Method – Machine-wise Machine Hour Rate

Imagine a printing press which is into printing books, newspaper, invitation cards and banners.

They must be using 4 different machines to print 4 different products (book, newspaper, invitation card & banner). These machines are different in terms of their purchase cost, useful life, size, power consumption, maintenance cost etc. Let's assume banner printing machine consumes highest power and book printing machine consumes least power.

If all these 4 machines are collectively considered as a "machining department"(like what we did in 3rd method) and if we calculate machine hour rate for the entire department, it may so happen that higher electricity consumed by one machine may get apportioned to other machines (which may not consume so much of power). Because of this, we may end up over charging our book customer and under charging our banner customer.

To avoid this, we need to calculate MHR for each machine separately and not for machining department as a whole. Then use Book printing machine's MHR for book cost sheet and banner printing machine's MHR for banner cost sheet. This will result in "correct costing" and helps avoiding "over costing" or "under costing".

Direct MHR or Basic MHR – Here we consider only overhead cost items.

Comprehensive MHR – Here we consider not only overheads, but also direct costs (Prime cost items) related to machine operation. ICAI follows the approach of Comprehensive MHR.

Under-absorption of overheads

When Actual Overheads are more than estimated/budgeted overheads = Under-absorption.

It is a kind of loss to the business.

When Actual Overheads are Less than estimated/budgeted overheads = Over-absorption. This results in gain to the business.

Note – While calculating actual overheads, we need to exclude all abnormal, non-recurring, exceptional items. Ex: Loss of stock by fire, accident, writing off old/obsolete stores, penalty paid on account of court orders/judgements, loss to labour strike etc.

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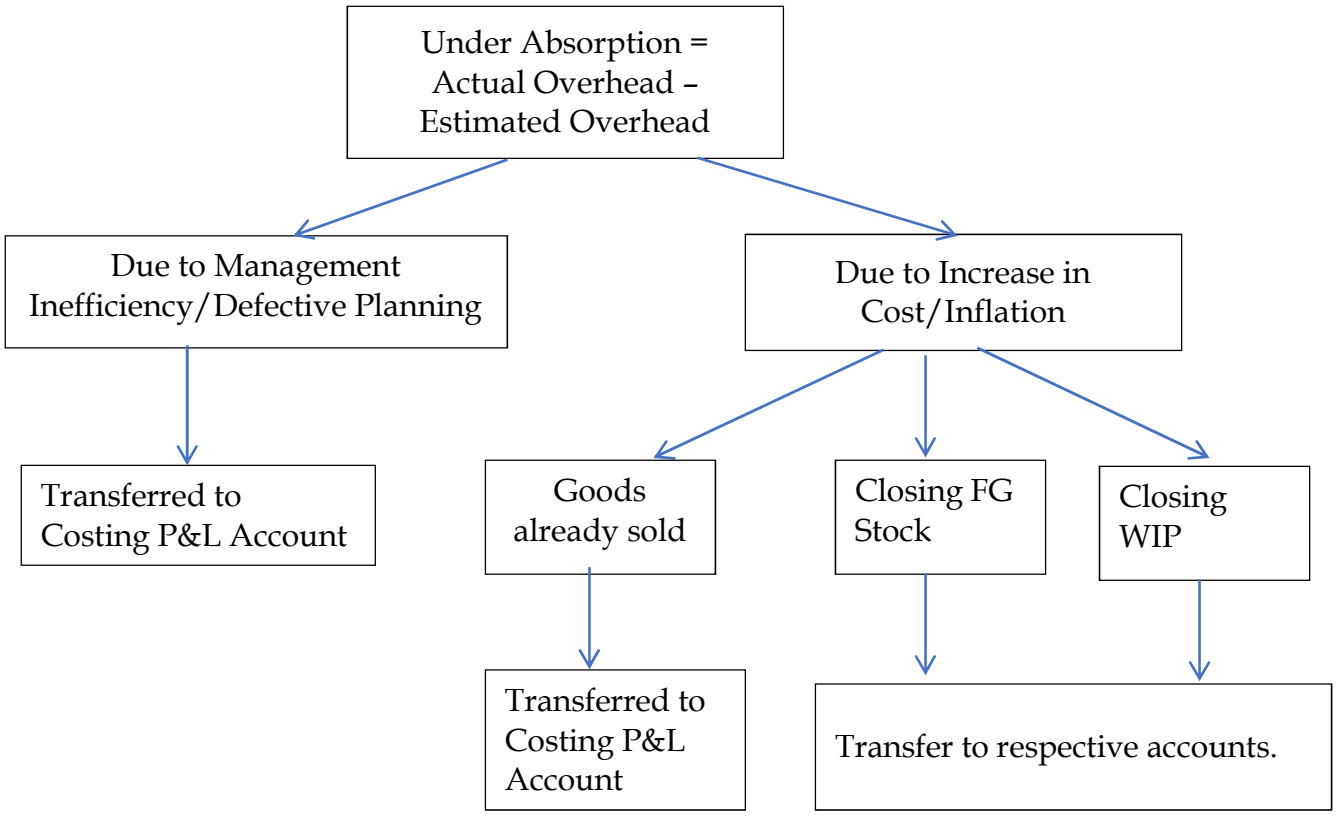

Chapter 4

Activity Based Costing

ABC is a technique which involves identification of cost with each cost driving activity and making it as the basis for apportionment of costs over different cost objects/ jobs/ products/customers or services.

ABC assigns cost to activities based on their use of resources. It then assigns cost to cost objects, such as products or customers, based on their use of activities. ABC can track the flow of activities in organization by creating a link between the activity (resource consumption) and the cost object.

ABC vs Traditional Costing

In traditional costing overheads are first related to cost centres (Production & Service Centres) and then to cost objects, i.e., products. In ABC, overheads are related to activities or grouped into cost pools (depending on the terminology preferred). Then they are related to the cost objects, e.g., products. The two processes are, therefore, very similar, but the first stage is different as ABC uses activities instead of functional departments (cost centres).

The problem with functional departments is that they tend to include a series of different activities, which incur a number of different costs that behave in different ways. ABC gives a more realistic picture of the way in which costs behave.

Stages in ABC

i) Identify the activities
ii) Relate overheads to activity
iii) Determine Cost driver
iv) Determine ABC rate
v) Assign Cost to cost object

Few examples of cost drivers can be

Activity Cost Pools	**Related Cost Drivers**
Ordering and Receiving Materials cost	Number of purchase orders
Setting up machines costs	Number of set-ups
Machining costs	Machine hours
Assembling costs	Number of parts
Inspecting and testing costs	Number of tests
Painting costs	Number of parts
Supervising Costs	Direct labour hours

Activity Based Budgeting

- Activity based budgeting analyse the resource input or cost for each activity.
- It provides a framework for estimating the amount of resources required in accordance with the budgeted level of activity.
- It is a planning and control system which seeks to support the objectives of continuous improvement.
- It means planning and controlling the expected activities of the organization to derive a cost-effective budget that meet forecast workload and agreed strategic goals.

Chapter- 5

Process Costing

Introduction

In some Industries, the Raw Material has to go through 2 (or) more Processes to get the Finished Product. Here, the Output of One Process will be the Input of the Next Process. Here, a separate method of Costing called "Process Costing" is adopted.

"Process Costing is a method of Costing which is used to ascertain the Cost of the Product at each Process, Stage of Manufacture (or) Stage of Operation."

This Method of Costing is used in Industries like:-Chemicals, Textiles This Method of Costing is used in Industries like: - Chemicals, Textiles, Oil Refineries, Paper, Sugar, Paints, Biscuits etc.

Features of Process Costing

The following are the basic Features of Process Costing Industries.

a) The plant / factory is divided into a number of processes, cost centers or departments. Each such division is a stage of production or a process.
b) Manufacturing activity is carried on continuously by means of one or more process run sequentially. **Note:** Sequential Processes are carried out for single product, whereas parallel processes are carried out after the split off point, in respect of Joint Products.
c) The output of one process becomes the input of another process.
d) The end product usually is of like (similar) units not distinguishable from one another.
e) It is not possible to trace the identify of any particular lot of output to any lot of input materials.

Process Loss

Meaning of Process Loss: Process Loss is defined as the loss material arising during the course of a processing operation. It is equal to the difference between the input quantity material and the output quantity. For accounting purposes, Process Loss is classified into

a) Normal Loss b) Abnormal Loss

Normal Loss - It represents the loss of material due to inherent and unavoidable reasons. It can be anticipated based on nature of material, nature of operation, past experience and technical data.

Abnormal Loss - It is the loss in excess of the pre-determined loss i.e. Excess of Actual Process Loss over Normal Loss. It occurs due to avoidable reasons and cannot be estimated in advance, e.g., carelessness of workers, a bad plant design or operation etc.

Abnormal gain - An unexpected gain in production under normal conditions. It can be compute in any of the alternative ways:

Inter Process Profits

Meaning of Inter-Process Profits:

Generally Processes are regarded as Cos Centers i.e. the focus is only on ascertainment of cost. Sometimes, they can also be treated as Profit Centers i.e. responsibility for earning profits. However, since output of intermediate processes is not directly saleable, the output of one process is transferred to the next process not at cost but at market value or cost plus a percentage of profit. This is called as Transfer Price. The difference between cost incurred and the transfer price is known as inter-process profits.

Advantages:

a) It is possible to compare cost of output and market value at each stage of completion.
b) It is easier to fix responsibility of Process Managers for Cost Control through the indirect means of achieving higher profits.
c) Each process is made to stand by itself as to the profitability.

Disadvantages:

a) It is a complicated method involving transfer-pricing considerations. The determination of appropriate transfer price is not a simple affair.

b) It might promote conflicts and misunderstandings among managers as regards comparative profitability.

c) It requires reconciliation between profits booked at each stage and actual realized profit since it shows profits lying unrealized in stock not sold out.

Chapter 6

Joint & By Product

Joint Products

Joint Products are Products of comparatively Equal Importance which are produced simultaneously from the same basic Raw Material, which may require further processing after the Point of Separation".

Nature -

1) They are produced from the same basic Raw Materials.
2) They are of comparatively equal importance.
3) They may need require further processing after the Point of Separation.

By-products

By-Products are Saleable (or) usable secondary products of relatively small value that are produced along with a Main product. These By-Products may (or) may NOT require further processing.

Treatment of By-Products in Costing

Treatment of by-product cost in Cost Accounting:

By-product cost can be dealt in cost accounting in the following ways:

(a) When they are of small total value: When the by-products are of small total value, the amount realised from their sale may be dealt in any one the following two ways:
    1. The sales value of the by-products may be credited to the Costing Profit and Loss Account and no credit be given in the Cost Accounts. The credit to the Costing Profit and Loss Account here is treated either as miscellaneous income or as additional sales revenue.
    2. The sale proceeds of the by-product may be treated as deductions from the total costs. The sale proceeds in fact should be deducted either from the production cost or from the cost of sales.

When the by-products are of considerable total value: Where by-products are of considerable total value, they may be regarded as joint products rather than as by- products. To determine exact cost of by-products the costs incurred upto the point of separation, should be apportioned over by-products and joint products by using a logical basis.

Apportionment of Joint costs:

1. **Physical unit method -** Under this method, a physical base such as the weight of the Raw Material (Kg, Tonnes, Litres) is applied to apportion this Joint Costs to the Joint Products.

2. **Market value at "Split-off Point":** Here the Joint Costs are apportioned on the basis of the Sale-Value of Joint products at 'Separation Point.'

3. **Market value "after" further Processing:** Under this method, Joint Cost is apportioned to Joint Products on the basis of the Final Sale Value of the Joint Products (i.e., Price after further processing).

4. **Net realizable value (or) "Reverse" Cost Method:** Under this method, the estimated Profit, the Selling and Distribution expenses and the post separation costs should be deducted from the selling price of each joint product. On the basis of this, a ratio is established which is then used to apportion the Joint Costs.

5. **Average (Uniform) method –** Here Joint cost is equally distributed. This is not a preferred option. It should be used only if none of the above methods are possible.

6. **Contribution Margin method –** Here, the contribution of all the products (i.e., Selling Price – Variable Cost) is considered as base to apportion the Joint Cost.

Most commonly used methods are Quantity method & Market Value at split off point Method. If question doesn't specify the method, it is preferred to follow either of the two. ICAI prefers Market Value at split of point method.

Chapter- 7

Operating Costing or Service Costing

Not much of theory questions are expected from this chapter. Identification of Cost Unit can be asked in exam. Few examples are given below:

Industry	***Cost Unit***
Passenger Transportation	*Per Passenger Per Km*
Goods Transportation	*Per Tonne Per Km*
Hotel Rooms	*Per Room Per Day*
Hospital	*Per Patient Per Day*
School/College	*Per Student Per Course*
Cinema Theatre	*Per Seat Per Show*

Chapter- 8

Cost Accounting System

1. Where the cost and financial accounts are kept in the same set of books, the system so evolved is known as Integrated accounting system.
2. Integrated Accounts provide (or) meet out fully the information requirements of costing as well as financial accounting.
3. For Cost Accounting, it provides useful information for ascertaining the cost of each product or job. For Financial Accounting, it provides the relevant information necessary for preparing the profit & loss account and Balance sheet.

Reconciliation of cost & financial profits

Different sets of accounts are maintained under financial accounting and cost accounting. The accounting principles, methods and practices are different under these two accounting systems. The maintenance of different sets of accounts with different objects will cause to show different figures of profit or loss in cost accounts and financial accounts and it will necessitate reconciling the two accounts periodically and a statement of reconciliation is prepared to show the reasons for different profit or loss shown by cost and financial accounts.

a) Items included in financial accounts only, but not in cost accounts : (i) Profit or loss on sale of fixed assets (ii) Discount on issue or redemption of shares and debentures (iii) Preliminary expenses & Goodwill written off (iv) Payment of Income-tax (v) Receipt of interest and dividends on investments (vi) Cash discounts and Bad debts (vii) Transfer of profits to reserves (viii) Distribution of dividends (ix) Expenses relating to previous year (x) Profit or loss relating to transactions of abnormal or non-recurring nature
b) Items included in the cost accounts only, but not in the financial accounts: (i) Charges in lieu of rent where premises are owned (i.e., Notional rent); (ii) Interest on capital employed in production, but upon which no interest is actually paid if the firm decided to treat interest as part of cost; (iii) Salary for the proprietor where he works but does not charge a salary.
c) Disagreement due to under or over absorption of overhead items.
d) Difference in stock valuation: In financial accounts, the stocks are valued at cost or net realizable value whichever is lower. Whereas in cost accounts stock may be valued only at cost, even if it is more than realizable value. Such difference in stock valuation may lead to difference in profits.
e) Difference in depreciation rates: In financial accounts the amount of depreciation is charged as per the rates given in the Companies Act, 2013. But in Cost accounts, appropriate and suitable method is used for calculation of the amount of depreciation.

Maintenance of books of accounts

Where the cost and financial accounts are kept in the same set of books, the system so evolved is known as integrated accounting system. Integrated Accounts provide (or) meet out fully the information requirements of costing as well as financial accounting. Under integrated accounting system there is no need to open a separate cost ledger. But there will be a number of subsidiary ledgers (Control account's) such as stores ledger, WIP ledger, finished goods ledger etc. in addition to debtor's ledger and creditor's ledger.

Under this system there will no general ledger adjustment or cost ledger control account? But the entries will be passed in the usual way as they are passed in financial books when the expenses are incurred.

"Advantages" of Integrated Accounting System:

i. There is no need to reconcile the profit as per cost records and financial records, as there is only one profit.
ii. Significant saving in the efforts of the accounting staff.
iii. No delay in obtaining information from the book of original entry (i.e journal).
iv. It is economical and financially feasible as it reduces the expenditure on accounting function due to "Centralization of Accounting function".

Essential "Pre-requisites" for Integrated Accounts:

The essential pre-requisites for integrated accounts include the following steps:

i) The management's decision about the Extent of Integration of the two sets of books. Some concerns find it useful to integrate upto the stage of primary cost or factory cost (i.e., partial integration) while other prefer full integration of the entire accounting records.
ii) A suitable Coding System must be made available so as to serve the financial needs and cost needs.
iii) Perfect Co-ordination should exist between the staff of financial department and cost department for the efficient functioning of the system.

Chapter- 9

Job Costing, Contract Costing and Batch Costing

A job refers to any specific assignment, contract or work order wherein work is executed as per customer's requirements. The output of the job generally consists of one unit or a manageable number of units.

Job costing is a method of ascertaining cost in those industries in which goods are manufactured or services rendered against specific orders from customers. Each work order or job order accepting is a cost unit. Costs are ascertained separately for each job or work order undertaken. The purpose of job costing is to ascertain the cost and profit on each individual job.

"Application" and suitability of Job costing: Job costing is used in the following situations:

(i) When jobs are executed for different customers according to their specifications.

(ii) When no two orders are alike in all respects and each order or job needs special treatment.

Contract costing

Contract Costing is a method of costing like Job / Process Costing. This method is adopted for Building/Construction/Engineering contracts.

Features of Contracts:

The contracts for which Contract Costing is applied will have the following features: -

- Contracts are undertaken to special requirements of the customers.
- Duration of contracts are relatively for a long period.
- Contract work i s done on the sites unlike manufacturing under a roof.
- Contract work mainly consists of construction activities.

Cost plus contract & Fixed price contract

Under Cost plus Contract, the contract price is ascertained by adding a percentage of profit to the total cost of the work. Such type of contracts is entered into when it is not possible to estimate the Contract Cost with reasonable accuracy due to unstable condition of material, labour services, etc.

Cost plus contracts have the following Advantages and disadvantages:

Advantages

1. The Contractor is assured of a fixed percentage of profit. There is no risk of incurring any loss on the contract.
2. It is useful especially when the work to be done is not definitely fixed at the time of making the estimate.
3. Contractee can ensure himself about 'the cost of the contract', as he is empowered to examine the books and documents of the contractor to ascertain the veracity of the cost of the contract.

Disadvantage -The contractor may not have any inducement to avoid wastages and effect economy in production to reduce cost.

Escalation clause

Escalation Clause"- is usually provided in the contract to safeguard the interest of parties to a contract against any likely changes in the price (or) utilization of material and labour. For example, in contracts covering a long period of time, sometimes the contractor finds it difficult for himself to estimate in advance the full cost of material, labour, etc. due to fluctuations in prices of these 'elements of cost '.

In an Endeavour to protect himself from losses arising out of such fluctuations in prices a clause may be incorporated in the agreement quoting price of the contracted goods (or) services to the effect that - in case, the prices of items specified in the agreement clause, by the time of execution of the contract change beyond a specified limit over the prices prevalent on the date of agreement, the resultant changes in expenditure will be passed on to the Contractee.

The terms of the Contract specify the procedure for calculating such adjustment in order to avoid all future disputes. Thus, such a clause safeguards the interests of both the Contractor and the Contractee - in case of future fluctuations in prices of materials and labour etc.

Batch costing

Application of Batch Costing: Batch costing may be used in the following Circumstances:

a) When the output of a job consists of several units and it is not economical to ascertain cost of every unit of output independently.
b) When customer's annual requirement is to be supplied in uniform quantities over the year.
c) When certain physical characteristics like Size, Color, Taste, Quality etc. are required uniformly over a collection of units. Example, garments of the same size, pharmaceuticals etc.
d) When an internal manufacturing order is made out for production of components / sub parts. Example, component parts of radio sets, watches etc.

Economic Batch Quantity: Economic Batch Quantity (EBQ) represents the optimum size for batch production. The Determination of EBQ involves two types of cost. These are**:**

- **Set - Up Cost:** The processing of a particular batch gives rise to clerical and machine set up costs followed by machine disassembly costs on completion of the batch. These costs are incurred in connection with each batch processed and are independent of the size of the batch.
- **Carrying cost (Holding cost):** The larger the batch size, the greater will be number of units in inventory. Hence the costs associated with holding the inventory like space occupancy, interest etc. will also be higher. These costs are called as carrying cost.
- If the batch size increases, there is an increase in the carrying cost but the set up cost per unit of product is reduced; this situation is reverse when the batch size decreases. Thus there is one particular batch size for which the total of set up and carrying costs are minimum. This size is known as economic or optimum batch quantity.

$$EBQ = \sqrt{\frac{2AS}{C}}$$

Where,

A = Annual Demand for the Product

S = Set Up cost per batch

C = Carrying cost per unit of production per annum.

Chapter 10

Cost Sheet

Responsibility Centre:

It is defined as an activity centre of a business organization entrusted with a special task. Under modern budgeting and control, financial executives tend to develop responsibility centers for the purpose of cost control. These departments are held responsible for their performance in terms of expenditure, revenues, profitability, return on investment etc. There are 4 types of responsibility centres-

a) "Cost" Centre: A cost centre is the smallest segment of activity or the area of responsibility for which costs are accumulated. It is defined as a location, person or an item of equipment or a group of these for which costs may be ascertained & used for the purpose of cost control. Cost centres are of two types

a) Personal cost centre consists of a person or group of persons; and

b) Impersonal cost centre consists of a location or an item of equipment or group of these.

In a manufacturing concern there are two types of cost centres namely:

- Production cost centre: Where raw material is handled for conversion into finished product. Here both direct & indirect expenses are incurred for e.g.: Machine shops, Assembly shops etc.
- Service cost centre: Which serves as an ancillary unit to a production cost centre. For e.g.: Power house, plant maintenance centre etc.

b) Revenue Centre – These are the segments (departments) that which are accountable for generation of revenue, sales, income. Example – Sales department. Their performance is measured by the revenue targets that they achieve.

c) "Profit" centre: Is that segment of activity of a business which is responsible for both revenue and for expenses and discloses the profit of a particular segment of activity. Each profit centre has a profit target and enjoys authority to adopt such policies as are necessary to achieve its targets.

d) "Investment' Center – These are the segments which are not only responsible for generating profits, but also held accountable for the return on investments (ROI). These departments have authority to make capital investments.

"Essential factors" for installing cost accounting system OR factors to be kept in mind while installing a costing system -

1. The objective of costing system must be predetermined, for example whether it is being introduced for fixing prices or for insisting a system of cost control.
2. The areas of operation of business wherein the management's action will be most beneficial. For instance, in a concern which is anxious to expand its operations, increase in production would require maximum attention. On the other hand for a concern which is not able to sell the whole of its production
3. The selling effort would require greater attention. The system of costing in each case should be designed to highlight, in significant areas, factors considered important for improving the efficiency of operations in that area.
4. The general organization of the business is to be studied, with a view to find out the manner in which the system of cost control could be introduced without altering or extending the organizational structure.
5. The manner in which Cost and Financial accounts could be inter-locked into a single integral accounting system and in which results of separate sets of accounts, cost and financial, could be reconciled by means of control accounts.

6. The cost accounting system should satisfy the following requirements:
   b. It should be tailor made, practical & capable of meeting the requirements of the concern.
   c. The data to be used by the cost accounting system should be accurate.
   d. Necessary cooperation and participation of executives and staff is essential.

e. The cost of installing and operating the system should be economical and useful.

f. The system of costing should not sacrifice the utility by introducing meticulous and unnecessary details.

Limitations of Cost Accounting

- Does not use time value of money
- Most of the costing techniques do not use effect of inflation/deflation
- Most suitable for companies with homogeneous products/services.
- Assumptions are subjective and may make the data incomparable.
- Does not consider certain costs in costing which creates differences in estimated profit and actual profit.
- Absence of consistency in cost accounting policies between branches, departments.

Difference between Cost Accounting and Management Accounting

	Basis	**Cost Accounting**	**Management Accounting**
(i)	Nature	It records the quantitative aspect only.	It records both qualitative and quantitative aspect.
(ii)	Objective	It records the cost of producing a product and providing a service.	It Provides information to management for planning and co-ordination.
(iii)	Area	It only deals with cost Ascertainment.	It is wider in scope as it includes financial accounting, budgeting, taxation, planning etc.
(iv)	Recording of data	It uses both past and present figures.	It is focused with the Projection of figures for future.
(v)	Development	Its development is related to industrial revolution.	It develops in accordance to the need of modern business world.
(vi)	Rules and Regulation	It follows certain principles and procedures for recording costs of different products.	It does not follow any specific rules and regulations.

Chapter 11

Budgets & Budgetary Control

A Budget has the following 4 "essential elements"-

1. A Budget is prepared prior to a defined period of time.
2. It is prepared for a definite future period.
3. The policy to be followed to attain the given objectives is defined before the budget is prepared.
4. The budget is a monetary and / or quantitative statement of that policy.

Budgetary Control - Budgetary Control has the following 4 steps:

1. Establishment of budget for each function of the organization.
2. Continuous comparison of the actuals with the budget figures - so as to know the variation.
3. Taking suitable remedial measures to achieve the derived objective – in case of any adverse variation
4. Revision of budgets – due to change in circumstances.

"Forecast" and "Budget"

" Forecast "	" Budget "
1. Forecast is a mere estimate of what is likely to happen. It is a statement of probable events which are likely to happen under anticipated conditions during a specified period of time.	1. Budget shows that policy and programmes to be followed in a future period under planned conditions.
2. Forecasts, being a statement of future events, do not connote any sense of control.	2. A budget is a tool of control since it represents actions which can be shaped according to will so that is can be suited to the conditions which may or may not happen.
3. Forecasting is a preliminary step for budgeting. It ends with the forecast of likely events.	3. It begins when forecasting ends. Forecasts are converted into budgets.
4. Forecasts have wider scope, since it can be made in those spheres also where budgets cannot interfere.	4. Budgets have limited scope. It can be made of phenomenon non-capable of being expressed quantitatively.

Master Budget:

Master Budget is a consolidated summary of the various "functional budgets". A Master Budget is the summary budget incorporating its component functional budget and which is finally approved, adopted and employed. It is the culmination of the preparation of all other Budgets like the Sales Budget, Production Budget, Purchase budget etc. It consists in reality of the Budgeted profit and loss account, the Balance Sheet and the Budgeted Funds Flow Statement.

The Master Budget is prepared by the Budget Committee - on the basis of co-ordinate functional budgets and becomes the target of the Company during the budget period when it is finally approved. This Budget acts as the Company's individualized key to successful financial planning and control. It provides the basis of computing the effect of any changes in any phase of operations, such as sales volume, product mix, prices, labour costs, material costs (or) changes in facilities. It segregates Income, Costs and Profits by areas of responsibility. Master budget presents all this information to the depth appropriate for the top management action.

In the Master Budget, costs are classified and summarized by types of expenses as well as by departments. It is considered as the best mode of understanding the Company's micro-economic position relating to the forthcoming Budget Period. Master budget is not merely a compendium of theoretical calculations. The figures that it contains are the reflection of the actual intentions of the Company relating to different areas for the forthcoming budget period.

Fixed Budget & Flexible Budget:

Fixed Budget	Flexible Budget
1. It is inflexible and remains the same irrespective changed of the volume of business activity	1. It can be suitably recasted quickly to suit conditions.
2. It assumes that conditions would remain static.	2. It is designed to change according to a change in the level of activity.
3. Costs are not classified according to their variability, i.e. fixed, variable and semi-variable.	3. Costs are classified according to the nature of variability.

4. Actual and budgeted performances can't be correctly compared if the volume of output differs.	4. Comparisons are realistic since the changed plain figures are placed against actual ones.
5. Accurate forecasting of results is difficult.	5. Flexible budget clearly shows the Impact of various expenses on the operational aspect of the business.
6. All conditions will remain unaltered is an unrealistic expectation on the part of the management.	6. Under flexible budgeting, series of fixed budgets are prepared for different levels of activity.

Budget Manual – A Budget manual is a collection of documents that contains key information for those involved in the budget planning process. It normally contains introductory explanation about the budget process, organization chart, company's long term goals and strategies, key assumptions made etc.

Zero based Budgeting - Zero-based budgeting (ZBB) is a method of budgeting in which all expenses must be justified for each new period. Zero-based budgeting starts from a "zero base," and every function within an organization is analyzed for its needs and costs. Budgets are then built around what is needed for the upcoming period, regardless of whether the budget is higher or lower than the previous one.

Zero-Based Budgeting vs. Traditional Budgeting

Traditional budgeting calls for incremental increases over previous budgets, such as a 10% increase in spending, as opposed to a justification of both old and new expenses, as called for with zero-based budgeting. Traditional budgeting analyzes only new expenditures, while zero-based budgeting starts from zero and calls for a justification of old, recurring expenses in addition to new expenditures. Zero-based budgeting aims to put the onus on managers to justify expenses, and aims to drive value for an organization by optimizing costs and not just revenue.

Advantages of ZBB

- ZBB requires companies to look over every department to make sure they are getting the correct amount of money.
- Efficiency: It helps judge actual need by focusing on current numbers instead of past budgets.

- Reduction in wasteful spending: It can remove redundant spending by reexamining potentially unnecessary expenditures.
- Coordination and Communication: It allows for better communication within departments by involving employees in decision-making and budget prioritization.

Limitations of ZBB

- ZBB requires detailed examination of each component of the business, making it a time consuming & tedious process.

Performance Budgeting

Performance budget is a budget that reflects the input of resources and the output of services for each unit of an organization. This type of budget is commonly used by the government to show the link between the funds provided to the public and the outcome of these services.

Decisions made on these types of budgets focus more on outputs or outcomes of services than on decisions made based on inputs. In other words, allocation of funds and resources are based on their potential results. Performance budgets place priority on employees' commitment to produce positive results, particularly in the public sector.

Difference between Cost Control and Cost Reduction

Cost Control	Cost Reduction
1. Cost control aims at maintaining the costs in accordance with the established standards.	1. Cost reduction is concerned with reducing costs. It challenges all standards.
2. Cost control seeks to attain lowest possible cost under existing conditions.	2. Cost reduction recognizes no condition as permanent, since a change will result in lower cost.
3. In case of cost control, emphasis is on past and present	3. In case of cost reduction, it is on present and future.
4. Cost controlis a preventive function	4. Cost reduction is a corrective function. It operates even when an efficient cost control system exists.
5. Cost control ends when targets are achieved.	5. Cost reduction has no visible end.

Chapter 12

Marginal Costing

CVP ANALYSIS

Profit of an undertaking depends upon a large number of factors, the most important of which are Cost of Manufacture, Volume of Sales and Selling Prices of products sold. The three factors of: - Cost. Volume and Profit are inter-connected and dependent on one another. **For Example: -** Profit depends upon Sales, Selling Price to a large extent depends upon Cost, Volume of Sales depends upon Volume of Production which in turn is related to Cost.

In Cost-Volume-Profit Analysis, an attempt is made to measure variations in Cost with variations in Volume of all the factors. Volume is probably the most important single factor which influences Cost. Often, outside factors over which management usually has no control, necessitate changes in volume and Costs do not always vary in proportion to the volume of output. This type of situation poses special problems for Management.

Importance of Cost-Volume-Profit Analysis:

The relationship between Cost, Volume and Profit makes up the Profit Structure of an Enterprise. This analysis may be applied for: - Profit Planning, Cost Control and Decision-making.

The main objectives of Cost-Volume-Profit Analysis are given below:

1. In Profit Planning, it is essential to know the relationship between Cost, Volume and Profit. The most important feature of Cost-Volume-Profit Analysis is the manner in which it relates Cost, Selling Price and Volume and enables calculations to be made to show the effect of changes in these on Profit.
2. This Analysis is of special help in the preparation of Flexible Budgets - which indicate Cost and Profit at various levels of activity.
3. It is useful in making Decisions like: - Make (or) Buy Decisions, Pricing Decision. Selection of a Product-Mix, Selecting the best Channel of Distribution, Selection the best Method of Production, etc.
4. In the Area of Control as well. Cost-Volume-Profit Analysis is of great assistance. The effect on Cost of changes in Volume can be evaluated for the purpose of reviewing Profits achieved and Cost incurred.

Chapter- 13

Standard Costing

Standard Costing means – **The comparison of the actual cost with the standards to know the difference.** This difference – is known as the "**variance**". It is necessary to know the variance – so that the company can find out the reasons for such a variance and take remedial measures in future.

Steps in Standard Costing

Standard Costing involves the following **5 STEPS:**

- **Step I:** Ascertain the Standard Cost for each element of cost (i.e., Material, Labour and Overheads)
- **Step II:** Measure the Actual Cost (incurred)
- **Step III:** Compare the Actual Cost with the Standard Cost - to know the variance (i.e. the difference).
- **Step IV:** Analyze the above variance – in order to find out the reasons for such a variance.
- **Step V:** Take appropriate remedial measures wherever necessary – in order to maintain and ensure maximum efficiency in future.

'Variance' may be favorable (or) unfavorable depending upon the circumstances. If the Actual Cost is higher than the Standard Cost, the difference would be termed as Unfavorable (or) Adverse Variance. If the Actual Cost is less than the Standard Cost the difference would be termed as Favorable Variance. A Favorable Variance contributes to Profits, while an Unfavorable Variances reduces Profit.

'Variance' is ascertained for each Element of Cost for which Standard has been established. These variances are further analyzed according to their causes so that proper Control by the Management can be exercised.

Favourable and Unfavourable variances –

When Actual Cost is less than the Standard Cost, - the difference is known as favourable (or) credit Variance. On the other hand, when Actual Cost exceeds the Standard Cost, the difference is termed as unfavourable, adverse (or) debits Variance. In other words, any Variance that increases the Actual Profits is favourable and any Variance that decreases the Profits is unfavourable.

Controllable & Uncontrollable variances -

If a Variance can be identified as the Primary responsibility of a Specified Person, - it is said to be a controllable Variance. The size of controllable Variance reflects the "Degree of Efficiency" of the Person Concerned. Thus, material used in excess of the Standard Quantity results in CONTROLLABLE Variance. If the excessive usage is due to Material being defective, the responsibility may rest with the Inspection Department - for poor inspection of Materials.

Disposal of Variances - The Cost Records maintained and entries made under a system of Standard Costing vary from Company to Company - depending upon the Information that is desired from Cost records, and the intended use of Standard Cost and Variance Analysis.

Variances which emerge in

Standard Costing and recorded in the Cost Books may be disposed of in any of the following ways

i) **"Transfer" to Costing P&L Account: -** In this Method, the **stock** of Work-in Progress, Finished Goods and Cost of Sales are maintained at Standard Cost and all Variances are charged to Costing Profit and Loss Account at the end of the Accounting period. This method is favored because Standard Costs facilitates prompt Inventory Valuation and also Variances are separated out so as to attract the attention of the Management.

ii) **Allocation of variance to Finished Stock, Work-in-Progress & Cost of Sales A/c:** Under this method, the Variances are distributed over the Stocks of Finished goods, Work-in-Progress and to the Cost of Sales Account - in proportion to the Closing Balances (value) of **each** Account depending upon the type of Variance.

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