GOVERNMENT POLYTECHNIC SONIPAT

FINANCE ACCOUNT AND AUDITING

COST ACCOUNTING

INTRODUCTION OF COST ACCOUNTING

- ***Cost accounting is the application of accounting and costing principles, methods, and techniques in the ascertainment of costs and the analysis of saving or excess cost incurred as compared with previous experience or with standards.***

SOME IMPORTANT POINT

- COST
- Cost is commonly defined as ‘sacrificed resource’ for a particular thing. If we buy a watch for $30, a number of dollars are considered to be the cost of that watch. Here, 30 dollars are sacrificed to obtain a watch. It is the simplest example but cost can be of anything which is measurable in terms of money. For example, the cost of preparing one pizza which in itself include various other costs like cost of flour, other ingredients, labor, electricity and other overheads. Just the same way, cost of production of any product or service can be determined
- COSTING
- ‘Cost’ is a term whereas ‘Costing’ is a process for determining the cost. It may be called a technique for ascertaining the cost of production of any product or service in the business organization. The real scope of this term can best be understood in the context of big manufacturing concerns who produce hundreds of products and spend a lot of money on material, labor and other overheads. The cost of each product in those organizations requires recording expenses with to each product or process, classifying expenses like direct material, labor, overheads etc, allocating direct expenses and suitable apportionment of overheads to each product for most correct determination of per unit cost of production of each product.

- COST ACCOUNTING
- This term is of utmost importance for the top management of any business. Cost Accounting is basically the next step to costing. Cost accounting involves analyzing relevant costing data, interpret it and present various management problems to management. The scope of cost accounting involves preparation of various budgets for an organization, determining standard costs based on technical estimates, finding and comparing with actual costs, ascertaining the reasons of by variance analysis etc.
- COST ACCOUNTANCY
- This term is over and above costing and cost accounting. It envisages application of costing and cost accounting in a business setup. Cost Accountancy facilitates management with cost control initiatives, ascertainment of profitability and informed decision making. It also includes determination of selling price for the products, division and unit wise profitability. Forecasting of expenses and future probable incomes is also a part of the practice of Cost Accountancy.

SCOPE OF COST ACCOUNTANCY

- (i) Cost Ascertainment
- (ii) Cost Accounting
- (iii) Cost Control
- (iv) Budgetary Control
- (v) Cost Audit
- (vi) Cost book-keeping: It involves maintaining complete record of all costs incurred from their incurrence to their charge to departments, products and services. Such recording is preferably done on the basis of double entry system.
- (vii)Cost system: Systems and procedures are devised for proper accounting for costs.
- (viii)Cost ascertainment: Ascertaining cost of products, processes, jobs, services, etc., is the important function of cost accounting. Cost ascertainment becomes the basis of managerial decision making such as pricing, planning and control.
- (ix). Cost Analysis: It involves the process of finding out the causal factors of actual costs varying from the budgeted costs and fixation of responsibility for cost increases.
- (x) Cost comparisons: Cost accounting also includes comparisons between cost from alternative courses of action such as use of technology for production, cost of making different products and activities, and cost of same product/ service over a period of time

NATURE OF COST ACCOUNTING

- 1. Cost book-keeping: It involves maintaining complete record of all costs incurred from their incurrence to their charge to departments, products and services. Such recording is preferably done on the basis of double entry system.
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CLASSIFICATION OF COST ACCOUNTING

- By Degree of Traceability of the Product

Direct and indirect expenses are main types of costs come under it. Direct expenses may directly attributable to a particular product. Leather in shoe manufacturing is a direct expenses and salaries, rent of building etc. come under indirect expenses.

- ***By Controllability***
- ***In this classification, two types of costs fall:***
- ***Controllable - These are controlled by management like material labour and direct expenses.***
- ***Uncontrollable - They are not influenced by management or any group of people. They include rent of a building, salaries, and other indirect expenses.***

- By Relationship with Accounting Period
- Classifications are measured by the period of use and benefit. The capital expenditure and revenue expenditure are classified under it. Revenue expenses relate to current accounting period. Capital expenditures are the benefits beyond accounting period. Fixed assets come under category of capital expenditure and maintenance of assets comes under revenue expenditure category.
- By Association with the Product
- There are two categories under this classification:
- **Product cost -** Product cost is identifiable in any product. It includes direct material, direct labor and direct overheads. Up to sale, these products are shown and valued as inventory and they form a part of balance sheet. Any profitability is reflected only when these products are sold. The Costs of these products are transferred to costs of goods sold account.
- **Time/Period base cost -** Selling expenditure and Administrative expenditure, both are time or period based expenditures. For example, rent of a building, salaries to employees are related to period only. Profitability and costs are depends on both, product cost and time/period cost.

- ***By Functions***
- Under this category, the cost is divided by its function as follows:
- **Production Cost** - It represents the total manufacturing or production cost.
- **Commercial cost** - It includes operational expenses of the business and may be sub-divided into administration cost, and selling and distribution cost.
- By Change in Activity or Volume
- Under this category, the cost is divided as fixed, variable, and semi-variable costs:
- **Fixed cost** - It mainly relates to time or period. It remains unchanged irrespective of volume of production like factory rent, insurance, etc. The cost per unit fluctuates according to the production. The cost per unit decreases if production increases and cost per unit increases if the production decreases. That is, the cost per unit is inversely proportional to the production. For example, if the factory rent is Rs 25,000 per month and the number of units produced in that month is 25,000, then the cost of rent per unit will be Rs 1 per unit. In case the production increases to 50,000 units, then the cost of rent per unit will be Rs 0.50 per unit.
- **Variable cost** - Variable cost directly associates with unit. It increases or decreases according to the volume of production. Direct material and direct labor are the most common examples of variable cost. It means the variable cost per unit remains constant irrespective of production of units.

TECHNIQUES OF COSTING

- Besides the methods of costing, following are the types of costing techniques which are used by management only for controlling costs and making some important managerial decisions. As a matter of fact, they are not independent methods of cost finding such as job or process costing but are basically costing techniques which can be used as an advantage with any of the methods discussed above.
- **1. Marginal Costing**
- Marginal costing is a technique of costing in which allocation of expenditure to production is restricted to those expenses which arise as a result of production, e.g., materials, labor, direct expenses and variable overheads. Fixed overheads are excluded in cases where production varies because it may give misleading results. The technique is useful in manufacturing industries with varying levels of output.
- **2. Direct Costing**
- The practice of charging all direct costs to operations, processes or products and leaving all indirect costs to be written off against profits in the period in which they arise is termed as direct costing. The technique differs from marginal costing because some fixed costs can be considered as direct costs in appropriate circumstances.
- **3. Absorption or Full Costing**
- The practice of charging all costs both variable and fixed to operations, products or processes is termed as absorption costing.
- **4. Uniform Costing**
- A technique where standardized principles and methods of cost accounting are employed by a number of different companies and firms is termed as uniform costing. Standardization may extend to the methods of costing, accounting classification including codes, methods of defining costs and charging depreciation, methods of allocating or apportioning overheads to cost centers or cost units. The system, thus, facilitates inter- firm comparisons, establishment of realistic pricing policies, etc.

METHOD OF COSTING

- **Methods of Costing**
- Different industries follow different methods to establish the cost of their product. This varies by the nature and specifics of each business. There are different principles and procedures for performing the costing. However, the basic principles and procedures of costing remain the same. Some of the methods are mentioned below:
- Unit costing
- Job costing
- Contract costing
- Batch costing
- Operating costing
- Process costing
- Multiple costing
- Uniform costing

METHOD OF COSTING

- **Unit costing:** This method is also known as "single output costing." This method of costing is used for products that can be expressed in identical quantitative units. Unit costing is suitable for products that are manufactured by continuous manufacturing activity: for example, brick making, mining, cement manufacturing, dairy operations, or flour mills. Costs are ascertained for convenient units of output.
- **Job costing:** Under this method, costs are ascertained for each work order separately as each job has its own specifications and scope. Job costing is used, for example, in painting, car repair, decoration, and building repair.
- **Contract costing:** Contract costing is performed for big jobs involving heavy expenditure, long periods of time, and often different work sites. Each contract is treated as a separate unit for costing. This is also known as terminal costing. Projects requiring contract costing include construction of bridges, roads, and buildings.
- **Batch costing:** This method of costing is used where units produced in a batch are uniform in nature and design. For the purpose of costing, each batch is treated as an individual job or separate unit. Industries like bakeries and pharmaceuticals usually use the batch costing method.
- **Operating costing or service costing:** Operating or service costing is used to ascertain the cost of particular service-oriented units, such as nursing homes, busses, or railways. Each particular service is treated as a separate unit in operating costing. In the case of a nursing home, a unit is treated as the cost of a bed per day, while, for busses, operating cost for a kilometer is treated as a unit.

METHOD OF COSTING

- **Process costing:** This kind of costing is used for products that go through different processes. For example, the manufacturing of clothes involves several processes. The first process is spinning. The output of that spinning process, yarn, is a finished product which can either be sold on the market to weavers, or used as a raw material for a weaving process in the same manufacturing unit. To find out the cost of the yarn, one needs to determine the cost of the spinning process. In the second step, the output of the weaving process, cloth, can also can be sold as a finished product in the market. In this case, the cost of cloth needs to be evaluated. The third process is converting the cloth to a finished product, for example a shirt or pair of trousers. Each process that can result in either a finished good or a raw material for the next process must be evaluated separately. In such multi-process industries, process costing is used to ascertain the cost at each stage of production.
- **Multiple costing or composite costing:** When the output is comprised of many assembled parts or components, as with television, motor cars, or electronics gadgets, costs have to be ascertained for each component, as well as with the finished product. Such costing may involve different methods of costing for different components. Therefore, this type of costing is known as composite costing or multiple costing.
- **Uniform costing:** This is not a separate method of costing, but rather a system in which a number of firms in the same industry use the same method of costing, using agreed-on principles and standard accounting practices. This helps in setting the price of the product and in inter-firm comparisons..

2. MATERIAL COSTING

MATERIAL COSTING

- Material costing is the process of determining the costs at which inventory items are recorded into stock, as well as their subsequent valuation in the accounting records. We deal with these concepts separately.
- **Material Costing for Initial Inventory Acquisition**
- A company must decide whether it will record acquired materials at their purchased prices, or if additional costs will be added, such as freight in, sales taxes, and customs duties. The addition of these other costs is allowable, but may require a certain amount of additional work. It is easier to charge these additional costs to expense as incurred, so they appear immediately in the cost of goods sold.
- Overhead is not allocated to raw materials, since these items have not undergone any production activities with which overhead is associated). Overhead is only allocated to work-in-process and finished goods inventory.

- **Material Costing for Subsequent Valuation**
- Once inventory has been received into stock, it is subject to the lower of cost or market (LCM) rule. In essence, this rule states that the recorded cost of inventory should be at the lower of its recorded cost or the market rate. From a practical perspective, this rule is usually only applied to those inventory items having the largest extended costs. Its application to low-value items would not result in any material changes, and so is avoided from an efficiency perspective.
- A cost layering concept must also be applied to inventory. Cost layering refers to the order in which inventory items are charged to the cost of goods sold when units are sold to customers. Several possible cost layering concepts that can be used are:
- *Specific identification method*. Assign costs to specific units of inventory, and charge these costs to expense when the specific units are sold. Usually only applies to expensive and unique inventory items.
- *First in, first out method*. Assign costs based on the assumption that the earliest goods acquired are the first ones sold. If prices are increasing, this tends to result in higher profits.
- *Last in, first out method*. Assign costs based on the assumption that the last goods acquired are the first ones sold. If prices are increasing, this tends to result in lower profits. This method is not allowed under international financial reporting standards.
- *Weighted average method.* Uses an average of the costs of all units in stock when charging costs to the cost of goods sold.

CENTRALIZED PURCHASING

- A purchasing system in which all the departments of a company with a wide geographical distribution can make purchases through a common purchasing organization. Centralized purchasing aids finding the best deals with local vendors for the corresponding location of the company department. Avoids duplicity of orders and promotes benefits arising from the high volume bulk discounts, lower transportation and inventory management costs, organized transactions and improved vendor relationships. Usually located at company headquarters. Opposite of decentralized purchasing.

DECENTRALIZED PURCHASING

- ***Concept And Meaning Of Decentralized Purchasing***
- Decentralized purchasing refers to purchasing materials by all departments and branches independently to fulfill their needs. Such a purchasing occurs when departments and branches purchase separately and individually. Under decentralized purchasing, there is no one purchasing manager who has the right to purchase materials for all departments and divisions. The defects of centralized purchasing can be overcome by decentralized purchasing system. Decentralized purchasing helps to purchase the materials immediately in case of an urgent situation.

FIRST IN FIRST OUT METHOD

- First In First Out (FIFO) is one of the cost formulas that help cost assignment for inventory valuation. Entities can easily use FIFO with periodic or perpetual inventory systems.
- In comparison to other inventory cost flow formulas and valuation methods, FIFO has advantages in some aspects but it is not without disadvantages in some situations.

1 ADVANTAGES OF FIFO VALUATION METHOD

- FIFO helps maintaining records of inventory in *natural* way i.e. recording is done in the same order as units are bought or produced therefore much easier to understand and relate.
- FIFO best fits the situation where entity holds inventory that has fast turnover and converts quickly thus revenue and costs are from related periods. This is also inline with matching principle of accounting. However, in some situations it can potentially misalign as discussed in disadvantages below.
- As ending inventory value is based on most recent purchases therefore, value is much better reflection of market prices of similar product prevailing at period end date.
- As oldest available units are accounted for under cost of goods sold, therefore, possible risk of reduced NRV and resulting loss recognition is negated automatically as entity is not dragging old units in inventory records.
- As the value of closing stock is pivotal in current asset total and related accounting ratios therefore, much relevant ending inventory value will lead to reliable analysis.
- Records each batch of inventory bought with respective cost thus management can ascertain inventories issued and held in warehouse are from which batch.
- Normally economies are inflationary meaning prices are always rising. Where inflation is causing increase in operating expenses, same inflation will also cause increase in ending inventory value which will help increase gross profit figure and ultimately covering the inflated operating expenses.
- Widely accepted by regulatory authorities and standards including IFRSs and GAAPs.

DISADVANTAGES OF FIFO VALUATION METHOD

- It can get clumsy, complex and difficult to manage the inventory and respective prices of each batch if entity places many order for goods that have fluctuating price. Thus prone to more errors as well.
- As cost of goods sold is based on the oldest inventory based on prices that may no longer relevant for analysis conducted after the end of the period. Therefore, additional work might be needed to adjust for inflation and other factors affecting inventory price to get the suitable figure.
- For costing decisions, the cost of sales value is not reliable especially under inflationary economies. As cost of sales is based on prices at the beginning of the period that may be significantly different from prices at the end of the year. If entity is using cost plus pricing then chances are that price deduced on such cost is inappropriate (causing it to be much lower than what it should be) and not according to prevailing market price.
- The effect of inappropriate cost of sales figure is amplified if entity buys inventory in the beginning of the period for the whole period especially if prices fluctuate significantly. Thus forcing management to change procurement process and spread the purchases over the period to reduce the effect which may cause higher total ordering cost.
- Matching principle requires the revenue and costs to be matched and reported in the same period. Compliance may become difficult if the nature of product is such that it has slow turnover and require time to convert and price may change during this delay thus revenues and costs to be from different periods.
- Because of inflation, value of inventory may increase even if the physical count has decreased. This cause overstatement of profit or “bloating” with no real value to back up and renders profit comparison over the period and other analysis based on profit unreliable.

- Highest in, first out (HIFO) is an inventory distribution method in which the inventory with the highest cost of purchase is the first to be used or taken out of stock. This will impact the company's books such that for any given period of time, the inventory expense will be the highest possible for cost of goods sold (COGS) and ending inventory will be the lowest possible

ADVANTAGES OF LAST-IN FIRST-OUT (LIFO) METHOD

- **(1). LIFO matches most recent costs against current revenues:** The LIFO method provides a better measurement of current earnings by matching most recent costs against current revenues. The non-LIFO methods (such as FIFO method) match old costs against current revenues. When old costs are matched against current revenues in an inflationary environment, the inventory profit (also known as 'paper profit' or 'transitory profit') is created. Inventory profit occurs when replacement cost of inventory is more than the inventory cost matched against revenues. This inventory profit understates cost of goods sold (COGS) and overstates profit. The LIFO helps in reducing the inventory profits by matching the most recent costs against revenues. It results in reduction of understatement of cost of goods sold (COGS) and overstatement of profit. Therefore the quality and reliability of earnings are improved under LIFO.
- **(2). Tax benefits and improvement in cash flows:** The major reason of the popularity of last-in, first-out (LIFO) inventory valuation method is its tax benefit. When LIFO is used in the periods of inflation, the current purchases at higher prices are matched against revenues that alleviate the overstatement of profit and therefore reduce income tax bill. The reduction in income tax results in improvement of cash flows of the company.
- **(3). LIFO minimizes write-downs to market:** The net income of a company that uses LIFO is less likely to be affected by decline in price in future. Usually, the companies using LIFO method do not have much inventory at current higher prices because, under this method, most recent inventory purchased at higher price is sold first. So the chances of write-downs to market in future due to decline in inventory prices are minimized or even eliminated under LIFO.
- **(4). Physical flow of inventory:** In some situations, the physical flow of inventory corresponds to the LIFO cost flow. For example, in the case of a coal pile, the most recent coal added to the coal pile is always on the top of the coal pile. Therefore, the last coal in is always the first coal out. This benefit is not a reason of the popularity of LIFO method because the situations where physical flow of inventory corresponds to the LIFO cost flow are very rare to find. The benefit 1, 2 and 3 described above are the main arguments of the widespread employment of this method.

DISADVANTAGES OF LAST-IN, FIRST-OUT (LIFO) METHOD

- The major drawbacks of using LIFO as inventory costing method are given below:
- **(1). Reduced earnings in inflationary times:**
- The LIFO method reduces reported earnings during the periods of inflation. Therefore, many companies fear that an accounting change to LIFO will have a negative effect on investors and will reduce the price of company's stock because many investors may not be able to understand the impact of LIFO and inflation on the reported earnings.
- **(2). Understatement of inventory:**
- Under LIFO method, the balance sheet inventory figure is usually understated because it is based on the oldest costs. Due to understatement of inventory, the working capital position may look worse than it really is.
- **(3). Problem of LIFO liquidation:**
- The LIFO liquidation may inflate the reported income for a given period that results in higher tax payments for the period. To avoid this problem, a company may purchase goods in large quantities with the intention to match them against revenues. Therefore, the adoption of LIFO may develop poor buying habits among companies.
- **(4). Manipulation of income:**
- A company using last-in, first-out (LIFO) method can easily manipulate its reported earnings for a period by changing its purchase pattern at the end of the year.

CONCEPT AND MEANING OF LIFO METHOD

- Last-In-First-Out (LIFO) method follows the principle that the last items of materials purchased are issued at first. The valuation of the materials issued is made according to the latest purchase price of materials. The closing stocks of materials are valued always on the earliest prices of materials. In case of a rising price, LIFO method is suitable because material is issued at current market price.

ADVANTAGES OF LIFO METHOD

- ***Advantages Of LIFO Method***

  The main advantages of LIFO method are as follows

  1. LIFO method is appropriate for matching cost and revenue.

  2. LIFO method is simple to operate and easy to understand.

  3. LIFO method facilitates complete recovery of material cost.

  4. LIFO method is most suitable when prices are rising.

DISADVANTAGES OF LIFO METHOD

- ***Disadvantages Of LIFO Method***

The main disadvantages of LIFO method are as follows

1. Inventory valuation does not reflect the current prices and therefore are useless in the context of current conditions.

2. Due to variation of prices, comparison of cost of similar job is not possible.

3. Calculations become complicated and cumbersome when rates of receipts are highly fluctuating.

4. LIFO involves considerable clerical work.

- What is an 'Economic Order Quantity - EOQ'
- Economic order quantity (EOQ) is an equation for inventory that determines the ideal order quantity a company should purchase for its inventory given a set cost of production, demand rate and other variables. This is done to minimize variable inventory costs, and the formula takes into account storage, or holding, costs, ordering costs and shortage costs. The full equation is as follows:

$$EOQ = \sqrt{\frac{2SD}{PI}}$$

- where :
  S = Setup costs
  D = Demand rate
  P = Production cost
  I = Interest rate (considered an opportunity cost, so the risk-free rate can be used)

DIFFERENT LEVELS OF STOCK

- Different levels of stock are mentioned in the stores records. The levels are:
- (a) Minimum level below which at any time the stock must not go;
- (b) Maximum level above which at any time the stock must not go;
- (c) Ordering or re-ordering level which if the stock is reached, the purchase requisition is needed to be sent to the buying department;
- (d) Danger level which if the stock is reached, then very urgent measure needs to be taken.

MINIMUM LEVEL:

- **Minimum Level:**
- The following factors are to be taken into consideration while fixing the minimum level:-
    - ***Nature of the Material:*** Minimum level must be maintained by the materials which are regularly stored. If a special item of material is to be purchased on a customer's request, minimum level is not required to be fixed for that.
    - ***The maximum time required from the date of order to the date of actual delivery:*** It is known as lead time. Provided the re-order point remains constant, the longer the lead time, the lower will be the minimum level.
    - ***Rate of material consumption:*** The minimum rate, the maximum rate & the normal rate of consumption are to be taken into consideration.

MAXIMUM LEVEL:

The following factors are to be taken into consideration while fixing the maximum level: -

- ***Rate of Material consumption.***
- ***The lead time***
- ***The maximum requirement of the material at any time.***
- ***Nature of the material:*** The materials which deteriorate quickly should be stored as less as possible.
- ***Storage space available for the material.***
- ***Price Economy-*** During the harvesting seasons, seasonal materials are cheap. So during the harvesting season maximum purchase is made & as a result the maximum level is high.
- ***Cost of storage & insurance***
- ***Cost of the material & finance available:*** The maximum level is likely to be low when the material is costly. Also the maximum level should be high if the price is likely to be going up.
- ***Turnover of the inventory:*** The maximum level is low in case of slow moving material & the maximum level is high in case of quick moving material.
- ***Nature of supply:*** The maximum level should be as high as possible, if the supply is uncertain.
- ***Economic Order Quantity:*** Upon the economic order quantity, maximum level largely depends, because the quantity is decided & hence the maximum level is influenced by the economy order quantity unless otherwise contra indicated.

ORDERING OR RE-ORDERING LEVEL:

- **Ordering or Re-ordering level:**
- Between the minimum level & the maximum level, this level is fixed. This level is fixed in such a manner that the requirement during the lead time is met by the excess of ordering level over the minimum level. Thus, while fixing the re-ordering level, the main factors to be considered are the minimum level, the rate of consumption & the lead time.
- For working out the above levels, the following formula may be used:
- **Maximum level = Re-order level *plus* Re-order quantity *minus* (Minimum usage*Minimum order period)**
- *Explanation:* On the date on which the quantity is ordered, the actual stock level shall be received, will be the quantity ordered *plus* re-order level *less* the minimum consumption during the least lead time.
- **Minimum level = Re-order level *minus* (Normal usage*Normal i.e. Average re-order period)**
- *Explanation*: In case the usage is normal, by the time the actual delivery against the order is received, the level will not go below this.
- **Ordering or Re-ordering level = Maximum usage*Maximum delivery period**
- *Explanation:* Even if the maximum consumption takes place, by the maximum lead time the stock shall just reach zero level.
- **Average Stock level=1/2*(Minimum level *plus* Maximum level)**

DANGER LEVEL:

- **Danger Level:**
- There is another level called danger level, in addition to the minimum, maximum & re-ordering level. Below the minimum level is this level & urgent measure is to be taken to replenish the stock when the actual stock reaches this level. The purchase quantity cannot be accurately fixed when the normal lead time is not available. So it is fixed in such a way that below the danger level, the actual stock does not fall by the actual lead time. This means that a cushion is contained by the minimum level so that the contingencies can be covered.
- The danger level is fixed by some concerns below the re-ordering level but above the minimum level. If, as soon as the stock reaches the re-ordering level, the action for purchase is taken, the danger level bears no significance, except that, when the danger level, but not yet the minimum level, is reached by the stock, for the purpose of ensuring that the delivery has been received before the actual stock reaches the minimum level, a reference may be made to the purchase department.
- When, below the minimum level, the danger level is fixed, it being reached by the actual stock, the detection of the defect in the system is done & the corrective measure becomes necessary. When, above the minimum level, the danger level is fixed, it being reached by the actual stock, to ensure that the stock may not go below the minimum level, preventive measures needs to be taken.
- **Example:**

3. Labour costing

CONCEPT OF LABOUR COST

- The control of labour costs requires the control of the labour behavior. Therefore, the management should study human behaviour, performance of labour, time and motion study, labour turnover, labour approach in order to control the labour cost.
- Labour cannot be stored for future reference. It is very much similar to the perishable nature of materials. Some materials may loose its quality and not used for the purpose of production. Such materials will be waste one. Likewise, once labour is lost, the same cannot be recovered and not effectively used in the days to come.
- If labour is kept idle, the management should pay remuneration or wages for such idle time. Hence, the management incurred two losses. They are loss of labour working hours and monetary loss. Hence, the management is very keen in the control of labour cost.

CAUSES OF LABOUR TURNOVER

- **Unavoidable causes of labour turnover**
- Unavoidable causes are natural causes are are not under the control of the management. Such causes normally include
- 1. Change of Locality
- 2. Death, retirement etc., of workers.
- 3. Transport or housing problem in the firm's locality.
- 4. Unfit for the work.
- 5. Misconduct of workers.
- 6. Sickness, accident, etc., of workers.
- 7. On account of personal betterment.

LABOUR TURNOVER COSTING

- Labour turnover involves accessions and separations of employees. Accessions means employment of workers, whereas separation involve termination of employment due to lay-offs, deaths, discharges, quits, etc. The rate of separation can be calculated with the help of the following formula:
- **Labour Turnover Formula =** (Total number of workers leaving the organization per month or year / Average number of workers on payroll for a month or year) x 100
- This can be illustrated with the help of the following example:
- The total number of workers leaving the concern is 500 a year and the average number of workers on the payroll for one year is 5000. The rate of turnover would be:
- 500/5000 x 100 = 10% per year.

LABOUR TURNOVER COSTING

- **Avoidable causes of Labour Turnover**
- Avoidable causes are the causes that are under the control of the management and are due to the personnel policy of the organization. Such causes are
- 1. Low wage rates and other allowances when compared to other concerns.
- 2. Unhealthy and bad working conditions.
- 3. Lack of job satisfaction due to faulty placement of workers.
- 4. Heavy work load and long working hours.
- 5. Absence of sound training programmes.
- 6. Lack of proper promotion methods.
- 7. Unsatisfactory medical and recreational facilities.
- 8. No job security.
- 9. Ill treatment of management towards the employees.

IDLE TIME

- **What is 'Idle Time'**
- Idle time is unproductive time on the part of employees or machines caused by management or as a result of factors beyond their control. Idle time is the time associated with waiting, or when a piece of machinery is not being used but could be. It could also be associated with computing, and in that case, refers to processing time.

WAGE PAYMENT SYSTEM

- The features of goods system of wages of payment are mentioned below:
- Suitable for both employer and employee.
- Simple to understand and easy to apply.
- Economical system.
- Guaranteed minimum wages.
- Assure the equal wages for the similar job.
- Encourage the competent workers.
- Accepted by a trade union.
- In accordance with the law of the country.
- Flexible

METHOD OF REMUNERATION

- **Financial Methods of Motivation**
- Money as a motivator can lead to problems for both individuals and organisations:
- Rewards fluctuate with the performance of the company and this can cause uncertainty in financial planning if employees come to depend upon rewards.
- If financial incentives are high and based on quantity, quality may be sacrificed, with serious long-term consequences for organisations.
- If rewards are based on individual performance, it can cause conflict between employees.
- The range of financial methods used to motivate employees includes:

METHOD OF REMNERATION

- Time Rates - Used when employees are paid for the amount of time they spend at work. It is a simple method for both the employee and business, and also means the business can plan ahead, however can reduce productivity as staff are paid regardless
- Piece Rates - Gives a payment for each item produced - it is therefore the easiest way for a business to ensure that employees are paid for the amount of work they do. Piece-rate pay encourages effort, but, it is argued, often at the expense of quality
- Performance Related Pay - Performance-related pay is a financial reward to employees whose work is considered to have reached a required standard, and/or is above average. Performance related pay is generally used where employee performance cannot be appropriately measured in terms of output produced or sales achieved.
- Profit-Sharing - Where profit is shared out between employees, meaning it is in everybody's interest to be productive
- Share Ownership and Share Options schemes - Offering shares is a more complicated kind of reward than paying employees cash. However, it can be much more effective in linking the objectives of the business (e.g. profit maximisation) and the objectives of employees (e.g. make a large gain on the value of shares held).
- Fringe Benefits - Non-taxable incentives given to employees and commonly include health insurance, group term life coverage, education reimbursement, childcare and assistance reimbursement, cafeteria plans, employee discounts, personal use of a company owned vehicle and other similar benefits.

4. Cost sheets

MEANING OF COST SHEET:

- Cost Sheet is a statement which presents detailed information relating to the various stages of cost. It also shows the total cost of the product manufactured during a particular period of time. Thus, the cost sheet is prepared for a particular period of time monthly, quarterly, yearly etc.

OBJECTS OF PREPARING A COST SHEET:

- **A cost sheet is prepared for:**
- ADVERTISEMENTS:
- (i) The total cost and cost per unit of the product can be ascertained;
- (ii) It helps the management to fix up the selling price on the basis of the cost per unit of the product after charging certain percentage of profit on cost;
- (iii) It also helps the management presenting a comparative study of current cost with the exis-ting cost per unit;
- (iv) After proper comparison the management can take the corrective measures;
- (v) It helps the management while formulating suitable production policy;
- (vi) It is very helpful to submit a price quotation for tenders; and
- (vii) It also helps the management by supplying suitable information for management control.

METHOD OF PREPARATION OF COST SHEET:

- **Method of Preparation of Cost Sheet:**
- Step I = Prime Cost = Direct Material + Direct Labour + Direct Expenses.
- Step II = Works Cost = Prime Cost + Factory/Indirect Expenses.
- Step III = Cost of Production = Works Cost + Office and Administration Expenses.
- Step IV = Total Cost = Cost of Production + Selling and Distribution Expenses. Profit = Sales – Total Cost.

FORMAT OF COST SHEET

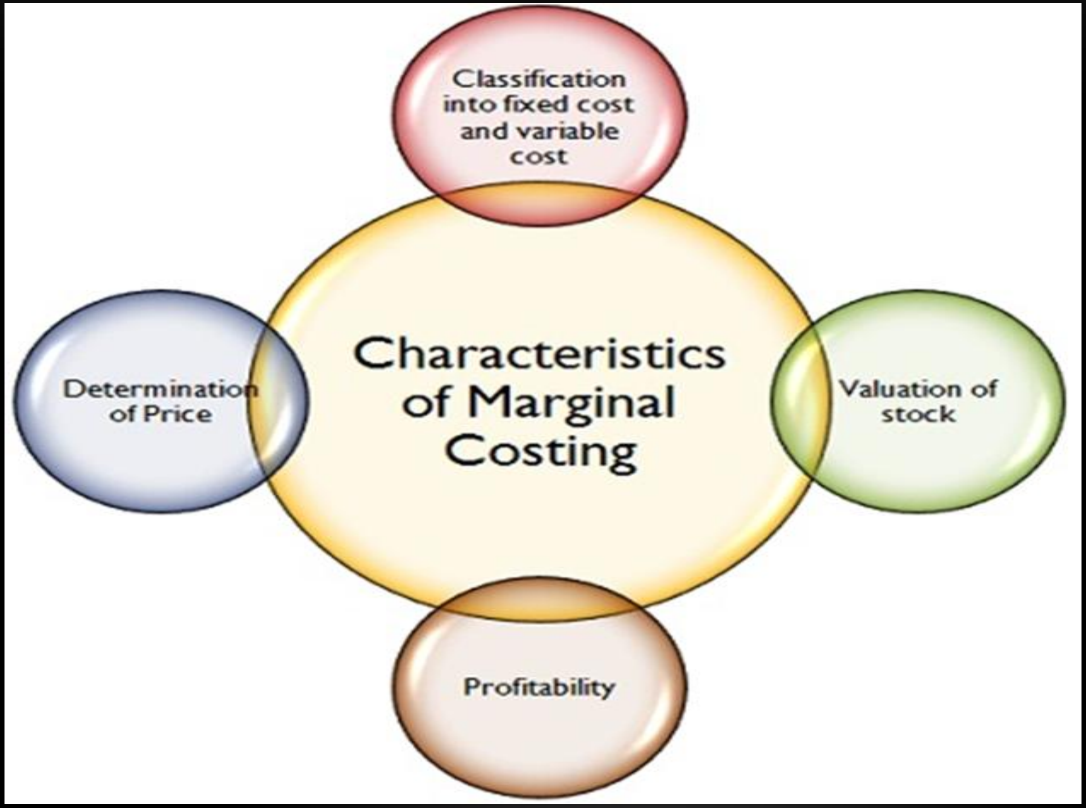
COST SHEET OR STATEMENT OF COST Total Units………		
Opening Stock of Raw material	… … … …	… … … …
Add: Purchases	… … … …	… … … …
	… … … …	… … … …
Less: Closing Stock	… … … …	… … … …
Cost of material Consumed →	… … … …	… … … …
Add: Direct Labor/Wages	… … … …	… … … …
Prime Cost →	… … … …	… … … …
Add: Works overheads	… … … …	… … … …
Works Cost →	… … … …	… … … …
Add: Administration overheads	… … … …	… … … …
Cost of Production →	… … … …	… … … …
Add: Selling and distribution overheads	… … … …	… … … …
Total Cost or Cost of Sale →	… … … …	… … … …

5. Marginal costing

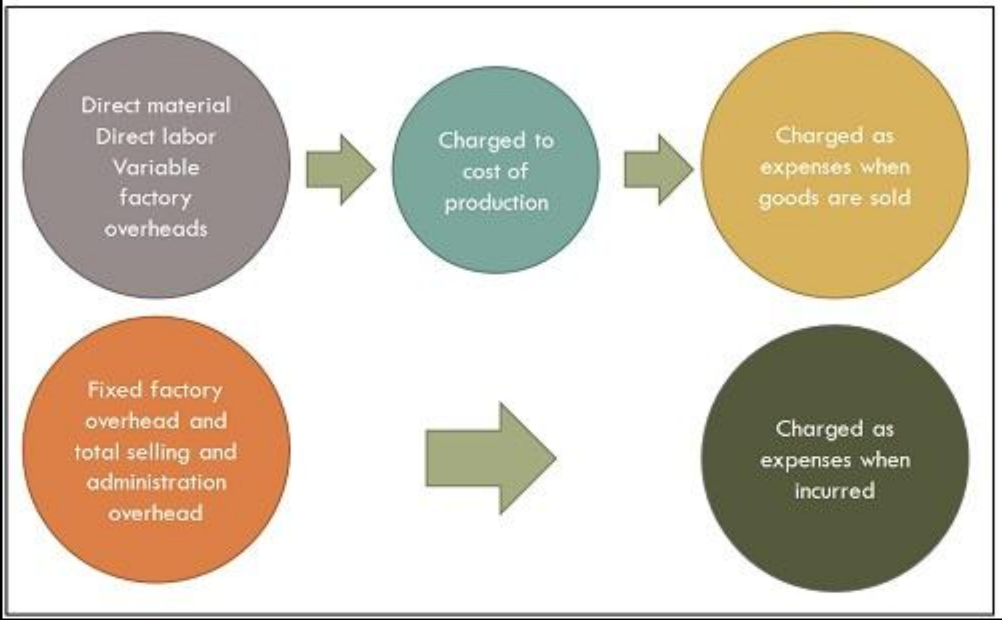
MARGINAL COSTING

- **Definition**: Marginal Costing is a costing technique wherein the marginal cost, i.e. variable cost is charged to units of cost, while the fixed cost for the period is completely written off against the contribution
- The term **marginal cost implies the additional cost involved in producing an extra unit of output**, which can be reckoned by total variable cost assigned to one unit. It can be calculated as:
- **Marginal Cost = Direct Material + Direct Labor + Direct Expenses + Variable Overheads**

CHARACTERISTICS OF MARGINAL COSTING



MARGINAL COSTING APPROCH



FACTS CONCERNING MARGINAL COSTING

- **Cost Ascertainment**: The basis for ascertaining cost in marginal costing is the nature of cost, which gives an idea of the cost behavior, that has a great impact on the profitability of the firm.
- **Special technique**: It is not a unique method of costing, like contract costing, process costing, batch costing. But, marginal costing is a different type of technique, used by the managers for the purpose of decision making. It provides a basis for understanding cost data so as to gauge the profitability of various products, processes and cost centers.
- **Decision Making**: It has a great role to play, in the field of decision making, as the changes in the level of activity pose a serious problem to the management of the undertaking.

COST-VOLUME PROFIT

- What is 'Cost-Volume Profit Analysis'
- Cost-volume profit (CVP) analysis is based upon determining the breakeven point of cost and volume of goods and can be useful for managers making short-term economic decisions. Cost-volume profit analysis makes several assumptions in order to be relevant including that the sales price, fixed costs and variable cost per unit are constant. Running this analysis involves using several equations using price, cost and other variables and plotting them out on an economic graph.

ADVANTAGES OF COST VOLUME PROFIT

- **1.Profit Planning-**Profit planning assists in finding the most profitable combination between selling price, cost and volume, and hence it enables calculations of profit at different sales levels. It assumes that sales volume is the primary cost driver. Therefore, managers need to take measures to increase profits by reducing costs, especially variable costs per unit, which vary with the level of activity. It is an important tool in short-term profit planning in an organization, especially in assessing margin of safety.
- **2.Decision Making-**analysis helps managers understand the relationship between cost, volume and profit; thus, it's a vital tool in the decision-making process in an organization. CVP analysis influences the decision of managers when it comes to matters such as product selection mix, make or buy decisions, selection of the best channel of distribution, the type of marketing strategy to use, what pricing policy to follow and the best method of production.
- **3.Price Determination-**CVP serves as a basis for price determination -- for example, in a business where a competitor sets the price of a product at $3.50 and the business is unable to go below $5, it's time to review the available options. The business can reduce the fixed cost and variable cost to price the product at $ 3.50 or terminate it. In addition, CVP is helpful in price determination because a business can establish the sensitivity of prices to the sales volume.
- **4.Cost Control-**The CVP model helps in evaluating the effects of cost on changes in volume for the purpose of reviewing profits achieved and costs incurred. For example, a company may want to purchase new equipment to increase its production level. The new machine may increase fixed costs. In this case, to find out the figure by which to decrease the variable cost in order to maintain the same profit level, the company uses CVP analysis.
- **5.Preparation of Budgets-**When companies are trying to determine what levels of sales to achieve to meet their targeted profits, they use CVP analysis. To achieve this they prepare flexible budgets that indicate the costs and the expected revenues at various stages of production. They are also able to understand the break-even concept, and hence they can make strategic budgets and avoid losses where necessary.

LIMITATION OF COST VOLUME PROFIT

- A number of limitations are commonly mentionedwith respect to CVP analysis:
- 1. The analysis assumes a linear revenue functionand a linear cost function.
- 2. The analysis assumes that what is produced issold.
- 3. The analysis assumes that fixed and variablecosts can be accurately identified.
- 4. For multiple-product analysis, the sales mix is assumed to be known and constant.
- 5. The selling prices and costs are assumed o beknown with certainty

6.Budgetary costing

BUDGETARY CONTROL

- “According to Brown and Howard, “Budgetary control is a system of controlling costs which includes the preparation of budgets, coordinating the departments and establishing responsibilities, comparing actual performance with the budgeted and acting upon results to achieve maximum profitability.” Weldon characterizes budgetary control as planning in advance of the various functions of a business so that the business as a whole is controlled.
- J. Batty defines it as, “A system which uses budgets as a means of planning and controlling all aspects of producing and/or selling commodities and services. Welsch relates budgetary control with day-to-day control process.” According to him, “Budgetary control involves the use of budget and budgetary reports, throughout the period to co-ordinate, evaluate and control day-to-day operations in accordance with the goals specified by the budget.”

OBJECTIVE OF BUDGETARY CONTROL

- **The main objectives of budgetary control are the follows:**
- 1. To ensure planning for future by setting up various budgets, the requirements and expected performance of the enterprise are anticipated.
- 3. To operate various cost centres and departments with efficiency and economy.
- 4. Elimination of wastes and increase in profitability.
- ADVERTISEMENTS:
- 5. To anticipate capital expenditure for future.
- 6. To centralise the control system.
- 7. Correction of deviations from the established standards.
- 8. Fixation of responsibility of various individuals in the organization.

ESSENTIALS OF BUDGETARY CONTROL:

- There are certain steps which are necessary for the successful implementation budgetary control system.
- **These are as follows:**
- 1. Organisation for Budgetary Control
- 2. Budget Centres
- 3. Budget Mammal
- 4. Budget Officer
- 5. Budget Committee
- 6. Budget Period
- 7. Determination of Key Factor.

ADVANTAGE AND DISADVANTAGE OF BUDGETARY CONTROL

BUDGETARY CONTROL

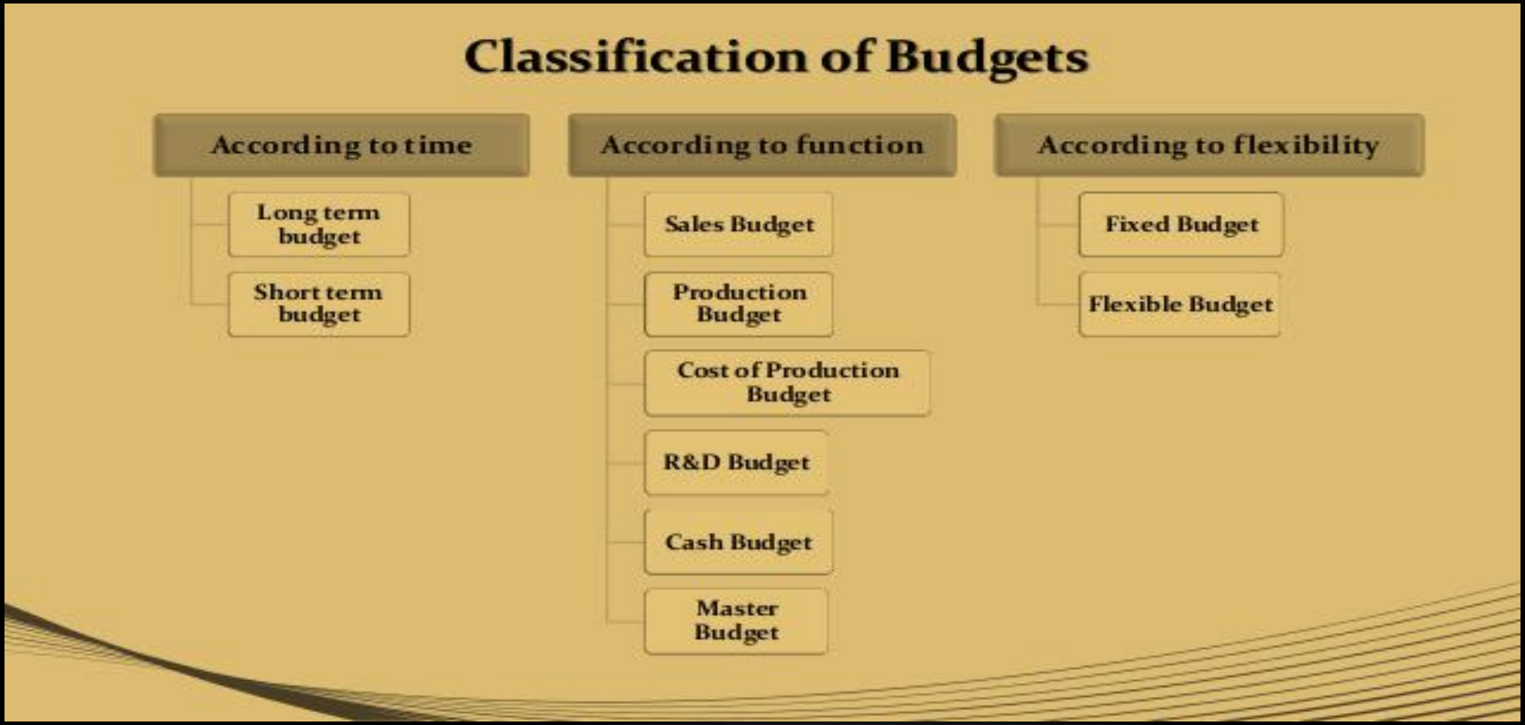
ADVANTAGES

1. Maximisation of Profits
2. Proper co-ordination
3. Provides Specific Aims
4. Tool for Measuring Performance
5. Economy
6. Corrective Action
7. Creates Budget Consciousness
8. Reduced Costs
9. Determine Weaknesses
10. Introduction of Incentive Schemes

LIMITATIONS

1. Uncertain Future
2. Revision Required
3. Discourage Efficient Persons
4. Problem of Co-ordination
5. Conflict among different departments
6. Depends upon support of top management

KIND OF BUDGET



7.Contract costing

CONTRACT COSTING

- **What is a Contract Costing?**
- Contract Costing is otherwise called as terminal costing. It is one of the methods of Job Costing. Contract costing is also prospered just like job costing. A separate number is allotted to each contract and records are also maintained for each contract separately. The cost unit is each contract account.
- **Types of Contract**
- The following are the types of contract.
- Fisted price contract
- Fisted price contract subject to Escalation Clause.
- Cost plus contract.

FEATURE OF CONTRACT COSTING

- The following are the features of contract costing.
- 1. A contract is undertaken according to the specific requirements of customers.
- 2. Generally, the duration of a contract is long period.
- 3. The contract is undertaken only at the site of the customer.
- 4. Contract work mainly consists of construction activities.
- 5. The specific order costing principles are applied in contract costing.
- 6. The size of a contract is usually large or bigger than jobs.
- 7. It requires a long time to complete a contract.
- 8. Each contract is an independent one, quite distinct from another.
- 9. A distinctive number is assigned to each contract to differentiate the contract from one another.
- 10. A separate account is maintained and prepared for each contract to find out the profit earned from each contract separately.

SPECIMAN OF CONTRACT COSTING

CONTRACT ACCOUNT (Subsequent year)

Dr. Cr.

PARTICULARS	AMT	PARTICULARS	AMT
To W.I.P. (Op)		By Bal.b/d (Res.)	XXX
Work certified	XXX		
Work Uncertified	XXX	By W.I.P. (Cl)	
To C.Y. Expenses	XXX	Work certified (Cum)	XXX
		Work Uncertified (Non Cum)	XXX
To Notional Profit c/d	XXX	By Sale of Scrap	XXX
	XXX		XXX
To P&L A/c (W.Note.)	XXX	By Notional Profit b/d	XXX
To Bal.c/d (Res. Profit)	XXX		
	XXX		XXX