DNYANSAGAR ARTS & COMMERCE COLLEGE, BALEWADI, PUNE 45.

SUBJECT - 356 E- Cost & Works Accounting -III

Class – T.Y. B.Com. 2019 - Pattern

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UNIT I – MARGINAL COSTING

Meaning of Marginal Costing:

> Marginal costing is a principle whereby variable costs are charged to cost units and the fixed costs attributable to the relevant period is written off in full against the contribution for that period.

> Marginal costing is the ascertainment of marginal cost and the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable cost. In marginal costing, costs are classified into fixed and variable costs.

Formulas used in Marginal Costing:

Sales — Variable cost + Fixed cost + Profit

Sales – Variable cost = Contribution

Sales – Variable cost = Fixed cost + Profit

Contribution = Fixed cost + Profit

Contribution – Fixed cost = Profit

CONTRIBUTION

- Contribution is the difference between the sale value and the marginal cost of sale.
- Total Contribution = Total Revenue – Total Variable Cost.
- Total Contribution >Fixed Cost
- Total Contribution = Fixed Cost
- Total Contribution < Fixed Cost.

CONTRIBUTION

Contribution Sales Ratio

- The contribution margin per unit expressed as a percentage of the selling price per unit.

- Contribution to sales ration (C/S Ration , P/V Ratio)
- $$\frac{\textbf{Contribution}}{\textbf{sales}} * 100$$
- $$\frac{\textbf{Changes in contribution/ profit or loss}}{\textbf{Changes in Sales}} * 100$$

BREAK EVEN POINT

Definition

In simple words, the break-even point can be defined as a point where total costs (expenses) and total sales (revenue) are equal. Break-even point can be described as a point where there is no net profit or loss.

BREAK EVEN POINT

BEP (Break – Even Point):

BEP= Fixed Cost / P/V Ratio;

Equation approach to Break Even Analysis

- $$\text{Break Even Points (Units)} = \frac{\text{Fixed Cost}}{\text{Contribution per unit}}$$

$$\text{Break Even Points(Rs.)} = \frac{\text{Fixed Costs}}{\text{C/S Ratio}}$$

$$= \text{BEP Unit} * \text{Selling price}$$

$$\text{Level of sales to achieve a target profit} = \frac{\text{profit} + \text{Fixed cost}}{\text{Contribution}}$$

EXAMPLE

Sales Rs.50, 000;

Fixed Cost Rs.1, 00,000;

Profit Rs.1,50,000;

Find out the following

(i) P/V Ratio (iii) BEP(iv) MOS

Solution :

P/V Ratio = Contribution / Sales

Contribution = Sales – Variable

Cost; **Fixed Cost + Profit / Sales**

Sales = Rs.50, 000, Profit =

Rs.1, 50, 000

1, 00, 000 + 1, 50, 000 / 5, 00, 000

= 0.5 or 50%.

> **BEP = Fixed Cost / P/V Ratio**

Fixed Cost = Rs.1, 00, 000;

P/V Ratio = 0.5 or 50%;

$$BEP = \frac{1,00,000}{50\%}$$

$$= 2,00,000$$

EXAMPLE

Sales Rs.50, 000;

Fixed Cost Rs.1, 00,000;

Profit Rs.1,50,000;

Find out the following

(i) P/V Ratio (iii) BEP(iv) MOS

Margin of Safety (MOS)

= Total Sales – Break Even Sales

5, 00, 000 – 2, 00, 000

= 3, 00, 000.

UNIT II – BUDGETORY CONTROL

BUDGETORY CONTROL

Definition:

Budgetary control refers to how well managers utilize budgets to monitor and control costs and operations in a given accounting period. In other words, budgetary control is a process for managers to set financial and performance goals with budgets, compare the actual results, and adjust performance, as it is needed.

Types of Budgets

Budgets can be classified as per the following basis.

> **Based on Area of Operation.**
  - Functional Budgets.
  - Master Budget.

> **Based on Capacity Utilization.**
  - Fixed Budget.
  - Flexible Budgets

Types of Budgets

Budgets can be classified as per the following basis.

Based on Time.

- Short Term.
- Medium Term.
- Long Term.

> **Based on Conditions**

- Basic Budget.
- Current Budget.

Flexible Budget

> Flexible budget is budget typically in the form of an income statement that is adjustable to any level of activity such as units produced or units sold. In a simple flexible budget, fixed costs stay constant whereas variable and semi-variable costs change according to a standard predetermined at the beginning of an accounting period. Variable costs may be represented as percentages of some base figure such as number of units or revenue.

Proforma of Flexible Budget.

In the books of ……….

Flexible Budget for the period ended ………

Normal Activity :	Units
Capacity :	100%

,……Continued on next slide

Proforma of Flexible Budget.

Production Units capacity %						
Particulars	Unit Cost Rs.	Total Cost Rs.	Unit Cost Rs.	Total Cost Rs.	Unit Cost Rs.	Total Cost Rs.
A. Fixed Expenses • Salary • Depreciation • Insurance • Rent B. Variable Expenses • Direct Material • Direct Labour • Direct Expenses • Indirect Material/ labour/Expenses • Variable Overheads						

Proforma of Flexible Budget.

Production Units capacity %						
Particulars	Unit Cost Rs.	Total Cost Rs.	Unit Cost Rs.	Total Cost Rs.	Unit Cost Rs.	Total Cost Rs.
C. Semi Variable Expenses • Electricity • Repairs and Maintenance • Administrative Exps. • Selling Exps. • Distributions Exp. TOTAL COST Add – Profit Less – Loss SALES =						

Functional Budget

Afunctional budget can be temporary or permanent, depending on why you are using it. If you are running an annual event, you may only need the functional budget for that event for three months. If you manu - facture three different products, you might want three permanent functional budgets to track the performance of each.

PURCHASE BUDGET

A purchases budget is created to keep track of the business' inventory value and the amount of goods sold. It is also used to help you keep track of your desired ending inventory value each month, since this is often a goal set by business owners. The purchases budget is often just a partial budget for a business and is often found in a business master budget.

Format of purchase budget …...continued on next slide…….

FORMAT OF PURACHSE BUDGET.

In the books of ......

Purchase Budget (in units) for the period ended

Particulars	Material		
	A Units	B Units	C Units
Requirement of material for the production during period. Add : Budget closing stock to be maintained at the end of the period. Less : Estimated opening stock at the beginning of the period. = Quantity of Material to be purchased.			

FORMAT OF PURACHSE BUDGET.

In the books of ……

Purchase Budget (in units) for the period ended

Particulars	Material		
	A Units	B Units	C Units
Requirement of material for the production during period. Add : Budget closing stock to be maintained at the end of the period. Less : Estimated opening stock at the beginning of the period. = Quantity of Material to be purchased.			

Production cost budget

Aproduction budget estimates the costs of manufacturing a product, whether it's for a company that manufactures its own products in-house, or a company that outsources the manufacturing of its products to a third party. Aproduction budget forecasts the costs of having the goods manufactured by someone else

FORMAT OF PRODUCTION COST BUDGET

In the books of …….

Production cost budget (in value) for the period ended….

	Periods	
	Department	Total
Units to be produced asper Production Budget		
Particulars	Amt	Amt
1. Direct material 2. Direct Labour 3. Direct Expenses 4. Factory overhead • Variable • Semi variable • Fixed Total Cost 5. Production cost = 1+2+3+4.		

SALES BUDGET

Most budgets focus on expenditures, detailing how much you can spend based on your expected income for any given period of time. The focus of a sales budget is the opposite of that. Its focus is only on how much money will be coming in. For most small businesses, the sales budget is the first step in budgeting and financial forecasting. The amount of income specified in the sales budget determines how much the company will be able to spend on its other budgets.

FORMAT Of SALES BUDGET

YEAR MONTHS	Product A		Product B		TOTAL	
	Quantity Units	Value Rs.	Quantity Units	Value Rs.	Quantity Units	Value Rs.

UNIT 3 - UNIFORM COSTING AND INTER FIRM COMPARISON

DEFINITION

CIMA, London Terminology defines uniform costing as “a common system using agreed concepts, principles and standard accounting practices adopted by different entities in the same industry to ensure that they all deal with accounting information in a like manner, the objective being to facilitate inter-firm comparison.”

Features of Uniform Costing:

Important features of uniform costing are as follows:

a. The same costing principles are applied by all member units for ascertaining cost.
b. Cost statements and reports are prepared on a uniform basis.
c. The accounting period is common for all member units.
d. All the member units adapt the same costing methods, techniques and systems for collection, ascertainment and control of cost.

Scope of Uniform Costing:

Amalgamation and closer working arrangements between groups of manufacturers in particular industries, and organisation for nationalization have necessitated, to a certain extent, the establishment of some degree of uniform costing by industries.

ESSENTIALS FOR INTERFIRM COMPARISON

> MEANING -----

Inter-firm comparison is a natural outcome of uniform costing system. Uniform costing is the foundation stone over which the structure of IFC is developed and adopted in a large scale.

Inter-firm comparison can be defined as the technique of evaluating the relative performance, efficiency, costs and profits of firms in a given industry'. The meaning of IFC can be easily explained by considering the main object of the system

ESSENTIALS FOR INTER FIRM COMPARISON

1. Existence of uniform costing

As indicated before acceptance of uniform costing only makes such types of scheme successful, so all need for a good uniform costing system should mast be fulfill.

2. Scope of data collection

It is nothing but ascertaining the areas of such type of comparison. This relies on needs of the member units, efficiency of the central organization, usefulness and value of the information, etc.

ESSENTIALS FOR INTER FIRM COMPARISON

3. Central Organization

For efficient operation of the scheme there is requirement of a central organization. Representations, Collection, analysis of data are the main responsibility of the organization. Though, protection of secrecy of absolute data of individual firm is the top function of the organization.

4. Methodology

Generally the data is to be supplied through the firms by regular interval in the set forms only. The general published data might be taken directly from such type of publication. When interpreting the analyzed data ratio analysis is resorted. The absolute data apart from that of the published data is never ever supplied to the other firms. It raises the confidence and utility of the comparison.

Following are important objectives of inter-firm comparison:

(a) I FC analyses costs of different firms with a view to spot out relative efficiency

(b) I F C provides aid to management in enforcing and reviewing budgetary control and standard costing. These techniques enforced in one firm are compared with those in other firms making more efficient use of the same. Inadequacies of standard costing and budgetary control are located by making inter-firm comparisons and remedial measures are introduced.

(c) IFC helps to prepare a comprehensive and detailed plan for firms or units to obtain optimum use of human and material resources.

The main objection of IFC is the improvement of efficiency and identification of weak points. IFC is a scheme consisting of exchange of information with regard to cost, profit, productivity and efficiency between the participating firms through a central organisation. IFC focuses the remedial measure of a number of problems related to profit, sales and production.

UNIT 4 –

INTRODUCTION TO MANAGEMENT INFORMATION SYSYTEM IN COATING

Amanagement information system (MIS) can be defined as a system that:

Provides information to support managerial functions like planning, organizing, directing, controlling.

Collects information in a systematic and a routine manner which is in accordance with a well defined set of rules.

Includes files, hardware, software and operations research models of processing, storing, retrieving and transmitting information to the users.

Objectives of Management Information Systems (MIS)

1. Facilitate the decision – making process by furnishing information in the proper time frame. This helps the decision – maker to select the best course of action.
2. Provide requisite information at each level of management to carry out their functions.
3. Help in highlighting the critical factors to the closely monitored for successful functioning of the organization.
4. Support decision-making in both structured and unstructured problem environments.

Provide a system of people, computers, procedures, interactive query facilities, documents for collecting, sorting, retrieving and transmitting information to the users

Functions of MIS

The main goal to set up an MIS in a company is to utilize the information by its managers for managerial purpose for decision making. MIS performs following functions to achieve organizational goal.

1. **To collect useful data:**

MIS executes the data through computer system using the sources of an organization. The organizational data is stores in computer system or as a paper record by its end users.

2. Data Processing:

Processing data includes converting the storage data into the required information to take beneficial actions. Data processing includes mathematical and logical operations like, calculations, sorting, classifying and summarizing the data. The data processing signifies processing activities as:-

Organize data

Analysis on data

Apply statistical, mathematical, operations

To create predictive modeling

Research and forecasting

3.Information storage and retrieval:

MIS stores data as an organizational record and processed for future use. The data organizes as a fields, records, files and databases for future use. Information retrieval comprises to access the stored data as per the requirements of the management users.

4. Disseminating management information:

information of finished product is categorizes and dispersed to the users in an organization as per the needs. This information could be periodic, through reports or online through computer terminals. Figure shows various functions performed by MIS.

COMPONENTS OF MIS

MIS has five main components that include:

1. Hardware:

Hardware means the machinery part of the MIS. You cannot run or access an MIS without the necessary hardware like computers, printers, servers, and other machinery. The machinery is required to process the data and access it when needed. You can upload the information or prepare an online MIS which different users can access and study from their desktops with a password. A shared MIS is often available to various levels of management that are accessed via desktops or laptops and printers.

2. **Software:**

The software is required to prepare the MIS. Apart from the system software like Mac or Windows, you may also need to use other software like accounting, payroll or other kinds of software like CRM. The software runs on the hardware and is used to prepare the MIS as well as to access it. For special information systems, you will also need to have special software in place to run and read the MIS.

3. Data:

Data is a core component of any and every MIS. Different business organizations have different sources and types of data. Banks and other financial institutions record financial data whereas hospitals and other health agencies record health-related and other forms of personal data of the patients. In this way, the type and volume of data can vary depending upon the needs of the business organization and its products/services. Data is the fuel for an MIS and without it, the MIS has no purpose or simply speaking, is meaningless and irrelevant.

4. Procedures:

Procedures or processes are also a very important component of MIS whose purpose is to generate the most suitable reports. Users must be able to generate various kinds of reports based on their use. They must also be able to restructure it as per the changing needs as well as the shape and size of the organization. Using an MIS also needs well-defined processes developed by people.

5. People:

These are the end-users who benefit from the MIS and the reports it generates. They include the IT department professionals, managers and other people who might need to access the information in the MIS or have the right to.

Advantages Of MIS

1. Can be a learning experience.
2. Provides predictive power.
3. Less expensive than trial and error method.
4. Speed allows consideration of more options.

Disadvantages of MIS.

1. Difficult to model a business system.
2. High degree of mathematical skills required.