Course No.: 503 **MANAGEMENT ACCOUNTING (MAAC XIX)**

(For B.Com General and Accounting & Finance)

Marks: 80 **Hours: 40**

Objective: This course provides the students an understanding of the application of accounting techniques for management.

Course Contents

UNIT-I: Management Accounting: Meaning, nature, scope, and functions of Management accounting in decision making; Tools and Techniques of Management accounting.
20: 10 hrs

UNIT-II: Cash flow Statements as per Indian Accounting Standard 3 (revised), fund flow statement.
20: 10 hrs

UNIT-III: Absorption & Marginal Costing: Marginal & differential costing as a tool for decision making –making or buy; change of product mix; Pricing; Break-even analysis; Exploring new markets; Shutdown decisions.
20: 10 hrs

UNIT-IV: Budgeting for profit Planning and Control: Meaning of budget and budgetary control; Objectives; Types of budgets; Fixed and flexible budgeting, Functional budgeting; Control ratios; Zero base budgeting; Responsibility accounting; Performance budgeting.
20: 10 hrs

Text and references:

1. Arora M.N.: Cost Accounting-Principles and Practices; Vikas, New Delhi.
2. Jain S.P. & Narang K.L: Cost Accounting; Kalyani, New Delhi
3. Anthony, Robert & Reece, et al: Principles of Management Accounting; Richard Irwin Inc.
4. Horngren, Charles, Forest and Datar et al: Cost Accounting- A Managerial Emphasis; Prentice Hall, New Delhi.
5. Sriram: Management Accounting and Financial Analysis, New Central Book Agency, Hyderabad.
6. Paul: Practical Cost and Management Accounting, New Central Book Agency, Hyderabad.

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Unit – 4: Budget and Budgetary Control

Meaning and Definition of Budget, Budgeting and Budgetary Control:

Budget: A budget is the monetary and / or quantitative expression of business plans and policies to be pursued in the future period of time. Budgeting is preparing budgets and other procedures for planning, coordination and control or business enterprises.

I.C.M.A. defines a budget as "A financial and / or quantitative statement, prepared prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective".

Budgeting refers to the process of preparing the budgets. It involves a detailed study of business environment clearly grasping the management objectives, the available resources of the enterprise and capacity of the enterprise.

Budgeting is defined by J.Batty as under: "The entire process of preparing the budgets is known as budgeting".

Thus budgeting is a process of making the budget plans. Preparation of budgets or budgeting is a planning function and their implementation is a control function. 'Budgetary control' starts with budgeting and ends with control.

Budgetary control is the process of preparation of budgets for various activities and comparing the budgeted figures for arriving at deviations if any, which are to be eliminated in future. Thus budget is a means and budgetary control is the end result. Budgetary control is a continuous process which helps in planning and coordination. It also provides a method of control.

According to Brown and Howard "Budgetary control is a system of coordinating costs which includes the preparation of budgets, coordinating the work of departments and establishing responsibilities, comparing the actual performance with the budgeted and acting upon results to achieve maximum profitability".

Wheldon characterizes budgetary control as planning in advance of the various functions of a business so that the business as a whole is controlled.

I.C.M.A. define budgetary control as "the establishment of budgets, relating the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results either to secure by individual actions the objectives of that policy or to provide a basis for its revision".

Features of Budgetary Control:

A budgetary control system can be defined as the establishment of budgets relating to the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results either to secure by individual action the objective of that policy or to provide a base for its revision.

The salient features of such a system are the following:

(a) Objectives: Determining the objectives to be achieved, over the budget period, and the policy or policies that might be adopted for the achievement of these ends.

(b) Activities: Determining the variety of activities that should be undertaken for the achievement of the objectives.

(c) Plans: Drawing up a plan or a scheme of operation in respect of each class of activity in physical as well as monetary terms for the full budget period and its part.

(d) Performance evaluation: Laying out a system of comparison of actual performance by each person, section or department with the relevant budget arid determination of causes for the discrepancies, if any.

(e) Control Action: Ensuring that corrective action will be taken where the plan is not being achieved and, if that is not possible, for the revision of the plan.

Objectives of Budgetary Control:

The following are the objectives of a budgetary control system:

a) Planning: A budget provides a detailed plan of action for a business over definite period of time. Detailed plans relating to production, sales, raw material requirements, labour needs, advertising and sales promotion performance, research and development activities, capital additions etc., are drawn up. By planning many problems are anticipated long before they arise and solutions can be sought through careful study. Thus most business emergencies can be avoided by planning. In brief, budgeting forces the management to think ahead, to anticipate and prepare for the anticipated conditions.

b) Co-ordination: Budgeting aids managers in co-coordinating their efforts so that objectives of the organisation as a whole harmonise with the objectives of its divisions. Effective planning and organisation contributes a lot in achieving coordination. There should be coordination in the budgets of various departments. For example, the budget of sales should be in coordination with

the budget of production. Similarly, production budget should be prepared in co-ordination with the purchase budget, and so on.

c) Communication: A budget is a communication device. The approved budget copies are distributed to all management personnel who provide not only adequate understanding and knowledge of the programmes and policies to be followed but also gives knowledge about the restrictions to be adhered to. It is not the budget itself that facilitates communication, but the vital information is communicated in the act of preparing budgets and participation of all responsible individuals in this act.

d) Motivation: A budget is a useful device for motivating managers to perform in line with the company objectives. If individuals have actively participated in the preparation of budgets, it act as a strong motivating force to achieve the targets.

e) Control: Control is necessary to ensure that plans and objectives as laid down in the budgets are being achieved. Control, as applied to budgeting, is a systematized effort to keep the management informed of whether planned performance is being achieved or not. For this purpose, a comparison is made between plans and actual performance. The difference between the two is reported to the management for taking corrective action.

f) Performance Evaluation: A budget provides a useful means of informing managers how well they are performing in meeting targets they have previously helped to set. In many companies, there is a practice of rewarding employees on the basis of their achieving the budget targets or promotion of a manager may be linked to his budget achievement record.

Advantages of Budgetary Control:

A budget is a blue print of a plan expressed in quantitative terms. Budgeting is technique for formulating budgets. Budgetary Control, on the other hand, refers to the principles, procedures and practices of achieving given objectives through budgets.

Here are the some Advantages of Budgetary Control:

a) Maximization of Profit: The budgetary control aims at the maximization of profits of the enterprise. To achieve this aim, a proper planning and co-ordination of different functions is undertaken. There is proper control over various capital and revenue expenditures. The resources are put to the best possible use.

b) Efficiency: It enables the management to conduct its business activities in an efficient manner. Effective utilization of scarce resources, i.e. men, material, machinery, methods and money - is made possible.

c) Specific Aims: The plans, policies and goals are decided by the top management. All efforts are put together to reach the common goal of the organization. Every department is given a target to be achieved. The efforts are directed towards achieving come specific aims. If there is no definite aim then the efforts will be wasted in pursuing different aims.

d) Performance evaluation: It provides a yardstick for measuring and evaluating the performance of individuals and their departments.

e) Economy: The planning of expenditure will be systematic and there will be economy in spending. The finances will be put to optimum use. The benefits derived for the concern will ultimately extend to industry and then to national economy. The national resources will be used economically and wastage will be eliminated.

f) Standard Costing and Variance analysis: It creates suitable conditions for the implementation of standard costing system in a business organization. It reveals the deviations to management from the budgeted figures after making a comparison with actual figures.

g) Corrective Action: The management will be able to take corrective measures whenever there is a discrepancy in performance. The deviations will be regularly reported so that necessary action is taken at the earliest. In the absence of a budgetary control system the deviation can determined only at the end of the financial period.

h) Consciousness: It creates budget consciousness among the employees. By fixing targets for the employees, they are made conscious of their responsibility. Everybody knows what he is expected to do and he continues with his work uninterrupted.

i) Reduces Costs: In the present day competitive world budgetary control has a significant role to play. Every businessman tries to reduce the cost of production for increasing sales. He tries to have those combinations of products where profitability is more.

j) Policy formulation: It helps in the review of current trends and framing of future policies.

Limitations of Budgetary Control System:

The list of advantages given above is impressive, but a budget is not a cure all for organisational ills. Budgetary control system suffers from certain limitations and those using the system should be fully aware of them.

a) The budget plan is based on estimates: Budgets are based on forecasting cannot be an exact science. Absolute accuracy, therefore, is not possible in forecasting and budgeting. The strength or weakness of the budgetary control system depends to a large extent, on the accuracy with which estimates are made. Thus, while using the system, the fact that budget is based on estimates must be kept in view.

b) Danger of rigidity: Budgets are considered as rigid document. Too much emphasis on budgets may affect day-to-day operations and ignores the dynamic state of organization functioning.

c) Budgeting is only a tool of management: Budgeting cannot take the place of management but is only a tool of management. 'The budget should be regarded not as a master, but as a servant.' Sometimes it is believed that introduction of a budget programme alone is sufficient to ensure its success. Execution of a budget will not occur automatically. It is necessary that the entire organisation must participate enthusiastically in the programme for the realisation of the budgetary goals.

d) False Sense of Security: Mere budgeting cannot lead to profitability. Budgets cannot be executed automatically. It may create a false sense of security that everything has been taken care of in the budgets.

e) Lack of coordination: Staff co-operation is usually not available during budgetary control exercise.

f) Expensive Technique: The installation and operation of a budgetary control system is a costly affair as it requires the employment of specialized staff and involves other expenditure which small concerns may find difficult to incur. However, it is essential that the cost of introducing and operating a budgetary control system should not exceed the benefits derived there from.

Essentials of Effective Budgeting:

A budgetary control system can prove successful only when certain conditions and attitudes exist, absence of which will negate to a large extent the value of a budget system in any business.

Such conditions and attitudes which are essential for effective budgeting are as follows:

a) Support of Top Management: If the budget system is to be successful, it must be fully supported by every member of the management and the impetus and direction must come from the very top management. No control system can be effective unless the organisation is convinced that the top management considers the system to be import.

b) Participation by Responsible Executives: Those entrusted with the performance of the budgets should participate in the process of setting the budget figures. This will ensure proper implementation of budget programmes.

c) Reasonable Goals: The budget figures should be realistic and represent reasonably attainable goals. The responsible executives should agree that the budget goals are reasonable and attainable.

d) Clearly Defined Organisation: In order to derive maximum benefits from the budget system, well defined responsibility centers should be built up within the organisation. The controllable costs for each responsibility centres should be separately shown.

e) Continuous Budget Education: The best way to ensure the active interest of the responsible supervisors is continuous budget education in respect of objectives, potentials & techniques of budgeting. This may be accomplished through written manuals, meetings etc., whereby preparation of budgets, actual results achieved etc., may be discussed.

f) Adequate Accounting System: There is close relationship between budgeting and accounting. For the preparation of budgets, one has to depend on the accounting department for reliable historical data which primarily forms the basis for many estimates. The accounting system should be so designed so as to set up accounts in terms of areas of managerial responsibility. In other words, responsibility accounting is essential for successful budgetary control.

g) Constant Vigilance: Reports comparing budget and actual results should be promptly prepared and special attention focused on significant exceptions i.e. figures that are significantly different from those expected.

h) Maximum Profit: The ultimate object of realizing the maximum profit should always be kept uppermost. **i) Cost of the System:** The budget system should not cost more than it is worth. Since it is not practicable to calculate exactly what a budget system is worth, it only implies a caution against adding expensive refinements unless their value clearly justifies them.

j) Integration with Standard Costing System: Where standard costing system is also used, it should be completely integrated with the budget programme, in respect of both budget preparation and variance analysis.

Essentials Factors for the Success of Budgetary Control

There are certain steps which are necessary for the successful implementation of a budgetary control system. They are as follows:

1. Organization for Budgetary Control: The proper organization is essential for the successful preparation, maintenance and administration of budgets. A budgetary committee is formed which comprises the departmental heads of various departments. All the functional heads of various departments are entrusted with the responsibility of ensuring proper implementation of their respective departmental budgets. This has been shown in the following chart.

2. Budget Centres: A budget centre is that part of the organization for which the budget is prepared. A budget centre may be a department, section of a department or any other part of the department. The establishment of budget centres is essential for covering all parts of the organization. The budget centres are also necessary for cost control purposes. The appraisal of performance of different parts of the organization becomes easy when different centres are established.

3. Budget Manual: A budget manual is a document which tells out the duties and also responsibilities of various executives concerns with the budgets. It specifies the relation among various functionaries.

A budget manual covers the following:

1) A budget manual clearly defines the objectives of budgetary control system. It also gives the benefits and principles of this system.

2) The duties and responsibilities of various persons dealing with preparation and execution of budgets are also given in a budget manual. It enables the management to know of persons dealing with various aspects of budgets and clarify their duties and responsibilities.

3) It gives information about the sanctioning authorities of various budgets. The financial powers of different managers are given in the manual for enabling the spending of amount on various expenses.

4) A proper table for budgets including the sending of performance reports is drawn so that every work starts in time and a systematic control is exercised.

5) The specimen forms and number of copies to be used for preparing budget reports will also be stated. Budget centres involved should be clearly stated.

6) The length of various budget periods and control points be clearly given.

7) The procedure to be followed in the entire system should be clearly stated.

8) A method of accounting to be used for various expenditures should also be stated in the manual.

4. Budget Officers: The chief executive who is at the top of the organization appoints some person as budget officer. The budget officer is empowered to scrutinize the budgets prepared by different functional heads and to make changes in them, if the situation so demands. The actual performance of department is
communicated to the budget officer. He determines the deviation in the budgets and takes necessary steps to rectify the deficiencies.

5. Budget Committee: In small scale concerns, the accountant is made responsible for preparation and implementation of budgets. In large scale concerns a committee known as budget committee is formed. The heads of all departments are made members of this committee. The committee is responsible for preparation and execution of budgets. The members of this committee put up the case of their respective departments and help the committee to take collective discussions. The budget office acts as coordinator of this committee.

6. Budget Period: A budget period is the length of time for which a budget is prepared. The budget period depends upon a number of factors. It may be different for different industries or even it may be different in the same industry or business.

7. Determination of Key Factors: The budgets are prepared for all functional areas. These budgets are inter-departmental and inter-related. A proper coordination amount different budget is necessary for making the budgetary control a success. The constraints on some budgets may have an effect on other budgets too. A factor which influences all other budgets is known as Key Factor or Principal Factor. There may be a limitation on the quality of goods a concern may sell. In this case, sales will be a key factor and all other budgets will be prepared by keeping in view the amount of goods the concern will be able to sell. The raw material supply may be limited; so production, sales and cash budgets will be decided according to raw materials budget. Similarly, plant capacity may be key factor if the supply of other factor is easily available.

Zero Based Budgeting

ZBB is defined as 'a method of budgeting which requires each cost element to be specifically justified, as though the activities to which the budget relates were being undertaken for the first time. Without approval, the budget allowance is zero'.

Zero – base budgeting is so called because it requires each budget to be prepared and justified from zero, instead of simple using last year's budget as a base. In Zero Based budgeting no reference is made to previous level expenditure. Zero based budgeting is completely indifferent to whether total budget is increasing or decreasing.

'Zero base budgeting' was originally developed by Peter A. Pyher at Texas Instruments. Peter A. Pyher has defined ZBB as "an operating, planning and budgeting process which requires each manager to justify his entire budget request in detail from scratch (hence zero base) and shifts the burden of proof to each manager to justify why we should spend any money at all".

CIMA has defined it "as a method of budgeting whereby all activities are revaluated each time a budget is set."

Benefits and Limitations of Zero Base Budgeting

The major benefits of the use of zero base budgeting can be the following:

a) Zero base budgeting examines all existing and new programmes and activities. It also makes the managers analyse their functions, establish priorities and rank them. This exercise helps in identifying inefficient or obsolete functions within the area of responsibility. In this way resources are allocated from low priority programmes to high priority programmes.

b) This system facilitates identification of duplication of efforts among organisational units. Such inefficient activities are eliminated and some other activities are merged.

c) All expenditures, under this system are critically reviewed and justified and all operations activities are evaluated in greater detail in terms of their cost-effectiveness and cost-benefits. This requires managers to find alternative ways of performing their activities which may result in more efficient procedures.

d) ZBB promotes the tendency to initiate studies and improvements during the period of operation as the persons at the helm of affairs know that the process would be exercised next year and their knowledge and training would enhance efficiency and cost-effectiveness.

e) ZBB provides for quick budget adjustments during the year. If revenue falls short in this process, it offers the capability to quickly and rationally modify

goals and expectations to correspond to a realistic and affordable plan of operations.

f) ZBB ensures greater participation of personnel in formulation and ranking processes. This helps in promoting level of job satisfaction and thus resulting in better control and operational efficiency in the organisation.

g) Zero base budgeting is a flexible tool that can be applied on a selective basis. It does not have to be applied throughout the entire organisation or even in all the service departments. Keeping in view the limitations of
time, money and persons available to install, operate and monitor it the management thus can select priority areas to which zero base budgeting may be applied.

Limitations of ZBB can be summed up as:

a) It challenges the past practices, performance, attitudes, of people.

b) It requires more time and effort.

c) Detailed costs and necessary information for decision packages often are not made available.

d) It increases paper work to unmanageable proportions.

e) Ranking a large number of decision packages becomes an unwieldy process.

f) Identifying various levels of funding, particularly the minimum level is a difficult task.

Steps in Zero-Base Budgeting

a) Determination of Objectives: The first step in ZBB is the clear definition of the objectives of budgeting. The objective may be to reduce expenditure on staff, to discontinue an activity or project in preference to another etc.

b) Determination of the Extent of Application: Whether ZBB should be introduced in all operational areas or only in some selected areas is to be decided.

c) Identification of Decision Units: Decision unit refers to a department, a project or a product line to which ZBB is to be applied. Identification of such units is done in consultation with managers.

d) Cost-Benefit Analysis: Cost benefit analysis is undertaken for each activity of the decision unit. It provides answers to the following questions.

1. Is it necessary to perform the activity at all? If the answer is in the negative, there is no need for proceeding further.

2. How much is the actual cost and what is the actual benefit of the activity?

3. What is the estimated cost and estimated benefit of the activity?

4. If the unit is dropped, can the unit be replaced by outside agency?

e) Preparation of budgets: The activities and projects for which benefit is more than the cost are ranked. Priority is accorded to the most profitable projects/activities, in the allocation of funds.

Cash Budget

A cash budget is a budget or plan of expected cash receipts and disbursements during the period. These cash inflows and outflows include revenues collected, expenses paid, and loans receipts and payments. In other words, a cash budget is an estimated projection of the company's cash position in the future.

Management usually develops the cash budget after the sales, purchases, and capital expenditures budgets are already made. These budgets need to be made before the cash budget in order to accurately estimate how cash will be affected during the period. For example, management needs to know a sales estimate before it can predict how much cash will be collected during the period. Management uses the cash budget to manage the cash flows of a company. In other words, management must make sure the company has enough cash to pay its bills when they come due.

Chartered Institute of Management Accountant (CIMA) defines cash budgets as a short-term fiscal plan expressed in money which is prepared in advance. It helps to determine the cash-inflow and cash-outflow of the business.

Features of Cash Budget

a) The cash-budget period is broken down into periods, mainly in months.

b) The cash-budget is always in columnar form i.e. column showing each month

c) Payments and receipts of cash are identified in different heading and showing total for each month.

d) The surplus of total cash payment over receipts or of receipts over payment for each month is shown.

e) The running balances of cash, which would be determined by taken the balance at the end of the previous month and adjusting it for either deficit or surplus of receipts over payments for current month, is identified.

Importance of Cash Budget

Cash budget is an important tool in the hands of financial management for the planning and control of the working capital to ensure the solvency of the firm. The importance of cash budget may be summarised as follow:

(1) Helpful in Planning. Cash budget helps planning for the most efficient use of cash. It points out cash surplus or deficiency at selected point of time and

enables the management to arrange for the deficiency before time or to plan for investing the surplus money as profitable as possible without any threat to the liquidity.

(2) Forecasting the Future needs. Cash budget forecasts the future needs of funds, its time and the amount well in advance. It, thus, helps planning for raising the funds through the most profitable sources at reasonable terms and costs.

(3) Maintenance of Ample cash Balance. Cash is the basis of liquidity of the enterprise. Cash budget helps in maintaining the liquidity. It suggests adequate cash balance for expected requirements and a fair margin for the contingencies.

(4) Controlling Cash Expenditure. Cash budget acts as a controlling device. The expenses of various departments in the firm can best be controlled so as not to exceed the budgeted limit.

(5) Evaluation of Performance. Cash budget acts as a standard for evaluating the financial performance.

(6) Testing the Influence of proposed Expansion Programme. Cash budget forecasts the inflows from a proposed expansion or investment programme and testify its impact on cash position.

(7) Sound Dividend Policy. Cash budget plans for cash dividend to shareholders, consistent with the liquid position of the firm. It helps in following a sound consistent dividend policy.

(8) Basis of Long-term Planning and Co-ordination. Cash budget helps in co-coordinating the various finance functions, such as sales, credit, investment, working capital etc. it is an important basis of long term financial planning and helpful in the study of long term financing with respect to probable amount, timing, forms of security and methods of repayment.

Methods of Preparation of Cash Budget

(1) Receipts and Payments Method

(2) Adjusted Profit and Loss Method or Adjusted Earnings Method or Cash Flow Method.

(3) Balance-Sheet Method.

The above methods of preparing cash budget represent different approaches.

(1) Receipts and Payments Method: It is the most simple and popular method of preparing cash budget. The method is most commonly used in forecasting the short term cash position. It is just like receipts and payment method in technique. It shows yearly cash position with proper breakups by quarters and months. For the purpose of preparing cash budget under this method, cash

information's are collected from other budgets such as sales budget, salary and wages budget, overhead budgets, material budget etc.

Under this method cash budget is divided into two parts. One part shows the timing and the amount of cash receipts and other part shows the timing and the amount of cash disbursements. Cash receipts and cash disbursements are estimated as under:

(i) Estimation of Cash Receipts: The amount of cash receipts can be estimated from the following items:

(a) Cash receipts arising from Operations. It includes advances form customers, estimated cash receipts from sales, debtors and collection of bills receivables. In estimating the amount of cash sales, cash-discount policy of the firm should be taken into account. Forecasting the receipts from credit sales, i.e., receipts from customers, B/R etc. Credit policy, terms of sales, position of customers, customers of the trade, any time lag between sale and collection should be considered.

(b) Non-operating Cash Receipts. It includes revenue receipts of non-operating nature and includes receipts from interest, dividend, rent, commission, royalty, sale of scrap, refund of tax etc.

(ii) Estimation of Cash Disbursements. The amount of cash disbursement can be estimated from the following items:

(a) Disbursement for operations Such as disbursements for cash purchases, wages and overheads, payment to creditors, bonus and other remunerations such as gratuities, pensions etc. and advances to suppliers. Terms of purchases, discounts receivable and time lag between the time of purchase and payment are taken into consideration.

(b) Disbursement for non-operating functions. It includes financial expenses on non operative functions such as interest, rent, dividend, donations, income tax and other taxes etc.

(c) Disbursement for capital transactions. Such as expenditure for expansion, payment of loans and overdrafts, redemption of debentures and preference capital etc.

In preparing cash budget, total budgeted cash receipts are added to the opening balance of cash and then the total budgeted disbursements are deducted there from to know the closing balance of cash. If opening cash balance and estimated total cash receipts are much larger than the estimated payments, there will be cash balance at close and management should take the necessary steps, to invest surplus funds for short period. On the other hand, if there is cash

shortage, the management must plan the borrowings for short period to manage the deficiency.

(2) Adjusted Profit and Loss Method or Adjusted Earnings Method or Cash Flow Method: The method is suitable for preparing the long term estimates of cash inflows and outflows.

It is also called cash-flow statement.

Under this method, profit and loss account is adjusted to know the cash estimates.

This method is useful in budgetary control technique.

Under this method, closing cash balance can be known by adding profits for the period to the opening cash balance because the theory is based on the elementary assumption that profits of a business are equal to cash. Thus if we assume that there are no credit transactions, capital transactions, accruals, provisions, stock fluctuations, or appropriations of profit, the balance of profit as shown by the profit and loss account should be equal to the cash balance in the case book.

However, such a situation will never exist in actual practice, the assumption needs adjustments. In preparing the cash forecasts, one proceeds with the budgeted profit for the period and then adjusts this figure by the items mentioned below

Items to be Added

(i) All non-cash items shown in the debit side of profit and loss account should be added to the budgeted profit because these items do not involve any cash outflows-depreciation, deferred revenue expenditure, writing off of intangible assets, prepaid expenses etc.

(ii) Changes in working capital which results in inflow of cash balances such as increase in closing stock, debtors and decrease in sundry creditors and other liabilities, redemption of preference shares and debentures, payment of dividend, purchase capital assets, investment etc.

(3) Balance-Sheet Method: This method is similar to that of profit and loss adjustment method, a budgeted balance sheet is prepared for the next period showing all items of assets and liabilities except cash balance which is found out as the balancing figure of the two sides of balance sheet.

If the asst side exceeds the liability side the balance shall reveal the bank over-draft and if the liability side is heavier than the asset side, the difference represents the bank balance.

Types of Budgets

As budgets serve different purposes, different types of budgets have been developed.

The following are the different classification of budgets developed

On the basis of time,

Functions, and

Flexibility or capacity.

(A) Classification on the basis of Time:

1. Long-term budgets
2. Short-term budgets
3. Current budgets

(B) Classification according to functions:

1. Functional or subsidiary budgets
2. Master budgets

(C) Classification on the basis of capacity:

1. Fixed budgets.
2. Flexible budgets

(A) Classification on the basis of time

1. Long-term budgets: Long-term budgets are prepared for a longer period varies between five to ten years. It is usually developed by the top level management. These budgets summarise the general plan of operations and its expected consequences. Long-term budgets are prepared for important activities like composition of its capital expenditure, new product development and research, long-term finance etc.

2. Short-term budgets: These budgets are usually prepared for a period of one year. Sometimes they may be prepared for shorter period as for quarterly or half yearly. The scope of budgeting activity may vary considerably among different organization.

3. Current budgets: Current budgets are prepared for the current operations of the business. The planning period of a budget generally in months or weeks. As per ICMA London, "Current budget is a budget which is established for use over a short period of time and related to current conditions."

(b) Classification on the basis of function

1. Functional budget: The functional budget is one which relates to any of the functions of an organization. The number of functional budgets depends upon the size and nature of business.

The following are the commonly used:

(i) Sales budget

(ii) Purchase budget

(iii) Production budget

(iv) Selling and distribution cost budget

(v) Labour cost budget

(vi) Cash budget

(vii) Capital expenditure budget

2. Master budget: The master budget is a summary budget. This budget encompasses all the functional activities into one harmonious unit. The ICMA England defines a Master Budget as the summary budget incorporating its functional budgets, which is finally approved, adopted and employed.

(C) Classification on the basis of capacity

1. Fixed budget: A fixed budget, on the other hand is a budget which is designed to remain unchanged irrespective of the level of activity actually attained. In a fixed budgetary control, budgets are prepared for one level of activity whereas in a flexibility budgetary control system, a series of budgets are prepared one for each level of alternative production levels or volumes. According to ICWA London 'Fixed budget is a budget which is designed to remain unchanged irrespective of the level of activity actually attained."

Fixed budget is usually prepared before the beginning of the financial year. This type of budget is not going to highlight the cost variance due to the difference in the levels of activity. Fixed budgets are suitable under static conditions.

2. Flexible budget: A flexible budget is defined as "a budget which, by recognizing the difference between fixed, semi-variable and variable cost is designed to change in relation to the level of activity attained". Flexible budgets represent the amount of expense that is reasonably necessary to achieve each level of output specified. In other words, the allowances given under flexibility budgetary control system serve as standards of what costs should be at each level of output.

According to ICMA, England defined Flexible Budget is a budget which is designed to change in accordance with the level of activity actually attained."

According to the principles that guide the preparation of the flexible budget a series of fixed budgets are drawn for different levels of activity. A flexible budget often shows the budgeted expenses against each item of cost corresponding to the different levels of activity. This budget has come into use for solving the problems caused by the application of the fixed budget.

Advantages of flexible budget

1. In flexible budget, all possible volume of output or level of activity can be covered.
2. Overhead costs are analysed into fixed variable and semi-variable costs.
3. Expenditure can be forecasted at different levels of activity.
4. It facilitates at all times related factor can be compared, which essential for intelligent decision are making.
5. A flexible budget can be prepared with standard costing or without standard costing depending upon what the company opts for.
6. A flexible budget facilitates ascertainment of costs at different levels of activity, price fixation, placing tenders and quotations.
7. It helps in assessing the performance of all departmental heads as the same can be judged by terms of the level of activity attained by the business.

Method of preparing flexible budget

The following methods are used in preparing a flexible budget:

1. Multi-activity method
2. Ratio method
3. Charting method.

1. Multi-Activity method: This method involves preparing a budget in response to different level of activity. The different level of activity or capacity levels are shown in Horizontal columns, and the budgeted figures against such levels are placed in the Vertical Columns. The expenses involved in production as per budget are grouped as fixed, variable and semi variable.

2. Ratio method: According to this method, the budget is prepared first showing the expected normal level of activity and the estimated variable cost per unit at the side expected level of activity in addition to the fixed cost as estimated. Therefore, the expenses as per budget, allowed for a particular level of activity attained, will be calculated on the basis of the following formula: Budgeted fixed cost + (Variable cost per unit of activity × Actual unit of activity).

3. Charting method: Under this method total expenses required for any level of activity, are estimated having classified into three categories, viz., variable, semi variable and fixed. These figures are plotted on a graph. The expenses are plotted on the Y-axis and the level of activity is plotted on X-axis. The graphs will thus, help in ascertaining the quantum of budgeted expenses corresponding to the level of activity attained with the help of this chart.

Difference between Fixed Budget and Flexible Budget

Fixed Budget	Flexible Budget
1. It does not change with actual volume of activity achieved. Thus it is known as rigid or inflexible budget.	It can be recasted on the basis of activity level to be achieved. Thus it is not rigid.
2. It operates on one level of activity and under one set of conditions. It assumes that there will be no change in the prevailing conditions, which is unrealistic.	It consists of various budgets for different levels of activity.
3. Here as all costs like - fixed, variable and semi-variable are related to only one level of activity. So variance analysis does not give useful information.	Here analysis of variance provides useful information as each cost is analysed according to its behaviour.
4. If the budgeted and actual activity levels differ significantly, then the aspects like cost ascertainment and price fixation do not give a correct picture.	Flexible budgeting at different levels of activity facilitates the ascertainment of cost, fixation of selling price and tendering of quotations.
5. Comparison of actual performance with budgeted targets will be meaningless specially when there is a difference between the two activity levels.	It provides a meaningful basis of comparison of the actual performance with the budgeted targets.

Sales Budget

Sales budget is one of the important functional budgets. Sales estimate is the commencement of budgeting may be both made in quantitative or in value terms. Sales budget is primarily concerned with forecasting of what products will be sold in what quantities and at what prices during the budget period. Sales budget is prepared by the sales executives taking into account number of relevant and influencing factors such as: Analysis of past sales, key factors, market conditions, production capacity, government restrictions, competitor’s strength and weakness, advertisement, publicity and sales promotion, pricing policy, consumer behaviour, nature of business, types of product, company objectives, salesmen’s report, marketing research’s reports, and product life cycle.

Production Budget

Production budget is usually prepared on the basis of sales budget. But it also takes into account the stock levels desired to be maintained. The estimated output of business firm during a budget period will be forecast in production budget. The production budget determines the level of activity of the produce business and facilities planning of production so as to maximum efficiency. The production budget is prepared by the chief executives of the production department. While preparing the production budget, the factors like estimated sales, availability of raw materials, plant capacity, availability of labour, budgeted stock requirements etc. are carefully considered.

Difference between Sales Budget and Production Budget

a) A sales Budget is a schedule, which shows expected sales in both units and sales rupees for the coming period. Whereas a production budget determines only the quantity to be produced in coming period.

b) A sales Budget is not prepared on the basis of production budget. But a production budget is prepared on the basis of sales budget.

c) Stock levels are not shown in sales budget. But, a production budget takes into account the stock levels desired to be maintained.

d) Sales budget is prepared by the sales executives. Whereas, production budget is prepared by the chief executives of the production department.

e) Estimated selling price is shown in sales budget. Whereas, production budget helps in calculating production cost for estimated level of production.

Cost of production Budget

After preparation of production budget, this budget is prepared. Production cost budgets show the cost of the production determined in the production budget. Cost of production budget is grouped in to material cost budget, labour cost budget and overhead cost budget. Because it break up the cost of each product into three main elements material, labour and overheads. Overheads may be further subdivided in to fixed, variable and semi-fixed overheads. Therefore separate budgets required for each item.

Master Budget

When the functional budgets have been completed, the budget committee will prepare a master budget for the target of the concern. Accordingly a budget which is prepared incorporating the summaries of all functional budgets. It comprises of budgeted profit and loss account, budgeted balance sheet, budgeted production, sales and costs. The ICMA England defines a Master Budget as ‘the summary budget incorporating its functional budgets, which is

finally approved, adopted and employed'. The master budget represents the activities of a business during a profit plan. This budget is also helpful in coordinating activities of various functional departments.

Control Ratios

Ratios are used by the management to determine whether performance of its activities is going on as per estimates or not. If the ratio is 100% or more, the performance is considered as unsatisfactory. The following are the ratios generally calculated for performance evaluation.

1. Capacity ratio: This ratio indicates the extent to which budgeted hours of activity is actually utilised.

Capacity Ratio = (Actual hours worked production/Budget hours) × 100

2. Activity ratio: This ratio is used to measure the level of activity attained during the budget period.

Activity ratio = (Standard hours for actual production/Budgeted hours) × 100

3. Efficiency ratio: This ratio shows the level of efficiency attained during the budget period

Efficiency ratio = (Standard hours for actual production/Actual hours worked) × 100

4. Calendar ratio: This ratio is used to measure the proportion of actual working days to budgeted working days in a budget period.

Calendar ratio = (Number of actual working days in a period/ Budgeted working days for the period) × 100

Budgetary Control and Standard Costing

Both standard costing and budgetary control achieve the same objective of maximum efficiency and cost reduction by establishing predetermined standards, comparing actual performance with the predetermined standards and taking corrective measures, where necessary. Thus, although both are useful tools to the management in controlling costs, they differ in the following respects:

Budgetary Control	Standard Costing
Budgetary control deals with the operations of a department of business as a whole.	**Standard costing is applied to manufacturing of a product, process or processes or providing a service.**
It is extensive in its application, as it deals with the operation of department	**It is intensive, as it is applied to manufacturing of a**

Budgetary Control	Standard Costing
or business as a Whole.	**product or providing a service**
Budgets are prepared for sales, production, cash etc.	**It is determined by classifying recording and allocating expenses to cost unit.**
It is a part of financial account, a projection of all financial accounts.	**It is a part of cost account, a projection of all cost accounts.**
Control is exercised by taking into account budgets and actual. Variances are not revealed through accounts.	**Variances are revealed through difference accounts.**
Budgeting can be applied in parts.	**It cannot be applied in parts.**
It is more expensive and broad in nature, as it relates to production, sales, finance etc	**It is not expensive because it relates to only elements of cost.**
Budgets can be operated with standards.	**This system cannot be operated without budgets**

Fixed Budget and Flexible Budget

Flexible Budget: A flexible budget is defined as "a budget which, by recognizing the difference between fixed, semi variable and variable cost is designed to change in relation to the level of activity attained". Flexible budgets represent the amount of expense that is reasonably necessary to achieve each level of output specified. In other words, the allowances given under flexibility budgetary control system serve as standards of what costs should be at each level of output.

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Fixed Budget	Flexible Budget
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Management Accounting - Advantages and Limitations of Budgetary Control

Advantages of Budgetary Control:

A budget is a blue print of a plan expressed in quantitative terms. Budgeting is technique for formulating budgets. Budgetary Control, on the other hand, refers to the principles, procedures and practices of achieving given objectives through budgets.

Here are the some Advantages of Budgetary Control:

a) Maximization of Profit: The budgetary control aims at the maximization of profits of the enterprise. To achieve this aim, a proper planning and co-ordination of different functions is undertaken. There is proper control over various capital and revenue expenditures. The resources are put to the best possible use.

b) Efficiency: It enables the management to conduct its business activities in an efficient manner. Effective utilization of scarce resources, i.e. men, material, machinery, methods and money - is made possible.

c) Specific Aims: The plans, policies and goals are decided by the top management. All efforts are put together to reach the common goal of the organization. Every department is given a target to be achieved. The efforts are directed towards achieving come specific aims. If there is no definite aim then the efforts will be wasted in pursuing different aims. d) Performance evaluation: It provides a yardstick for measuring and evaluating the performance of individuals and their departments.

e) Economy: The planning of expenditure will be systematic and there will be economy in spending. The finances will be put to optimum use. The benefits derived for the concern will ultimately extend to industry and then to national economy. The national resources will be used economically and wastage will be eliminated.

f) Standard Costing and Variance analysis: It creates suitable conditions for the implementation of standard costing system in a business organization. It reveals the deviations to management from the budgeted figures after making a comparison with actual figures.

g) Corrective Action: The management will be able to take corrective measures whenever there is a discrepancy in performance. The deviations will be regularly reported so that necessary action is taken at the earliest. In the absence of a budgetary control system the deviation can determined only at the end of the financial period.

h) Consciousness: It creates budget consciousness among the employees. By fixing targets for the employees, they are made conscious of their responsibility. Everybody knows what he is expected to do and he continues with his work uninterrupted.

i) Reduces Costs: In the present day competitive world budgetary control has a significant role to play. Every businessman tries to reduce the cost of production for increasing sales. He tries to have those combinations of products where profitability is more.

j) Policy formulation: It helps in the review of current trends and framing of future policies.

Limitations of Budgetary Control System:

The list of advantages given above is impressive, but a budget is not a cure all for organisational ills. **Budgetary control system suffers from certain limitations and those using the system should be fully aware of them.**

a) The budget plan is based on estimates: Budgets are based on forecasting cannot be an exact science. Absolute accuracy, therefore, is not possible in forecasting and budgeting. The strength or weakness of the budgetary control system depends to a large extent, on the accuracy with which estimates are made. Thus, while using the system, the fact that budget is based on estimates must be kept in view.

b) Danger of rigidity: Budgets are considered as rigid document. Too much emphasis on budgets may affect day-today operations and ignores the dynamic state of organization functioning.

c) Budgeting is only a tool of management: Budgeting cannot take the place of management but is only a tool of management. 'The budget should be regarded not as a master, but as a servant.' Sometimes it is believed that introduction of a budget programme alone is sufficient to ensure its success. Execution of a budget will not occur automatically. It is necessary that the entire organisation must participate enthusiastically in the programme for the realisation of the budgetary goals.

d) False Sense of Security: Mere budgeting cannot lead to profitability. Budgets cannot be executed automatically. It may create a false sense of security that everything has been taken care of in the budgets.

e) Lack of coordination: Staff co-operation is usually not available during budgetary control exercise.

f) Expensive Technique: The installation and operation of a budgetary control system is a costly affair as it requires the employment of specialized staff and involves other expenditure which small concerns may find difficult to incur. However, it is essential that the cost of introducing and operating a budgetary control system should not exceed the benefits derived there from.

Standard Cost and Estimated Cost

Estimates are predetermined costs which are based on historical data and are often not very scientifically determined. They usually compiled from loosely gathered information and therefore, they are unsafe to use them as a tool for measuring performance. Standard costs are a predetermined cost which aims at what the cost should be rather then what it will be. Both the standard costs and

estimated costs are used to determine price in advance and their purpose is to control cost.

But, there are certain differences between these two costs as stated below:

The following are some of the important differences between standard cost and estimated cost:

Basis	Standard Cost	Estimated Cost
a. Emphasis	Standard cost emphasizes as what the cost 'should be' in a given set of situations.	Estimated cost emphasizes on what the cost 'will be'.
b. Basis for calculation	Standard costs are planned costs which are determined by technical experts after considering levels of efficiency and production.	Estimated costs are determined by taking into consideration the historical data as the basis and adjusting it to future trends.
c. Efficiency measurement	It is used as a devise for measuring efficiency It cannot be used as a devise to determine efficiency	It only determines expected costs.
d. Cost control	Standard costs serve the purpose of cost control	Estimated costs do not serve the purpose of cost control.
e. Part of cost accounting	Standard costing is part of cost accounting process	Estimated costs are statistical in nature and may not become a part of accounting.
f. Technique of cost accounting	It is a technique developed and recognised by management and academicians.	It is just an estimate and not a technique
g. Applicability	It can be used where standard costing is in operation	It may be used in any concern operating on a historical cost system.

Budgetary Control and Standard Costing

Both standard costing and budgetary control achieve the same objective of maximum efficiency and cost reduction by establishing predetermined standards, comparing actual performance with the predetermined standards and taking corrective measures, where necessary.

Thus, although both are useful tools to the management in controlling costs, they differ in the following respects:

Budgetary Control	Standard Costing
Budgetary control deals with the operations of a department of business as a whole	
Standard costing is applied to manufacturing of a product, process or processes or providing a service. It is extensive in its application, as it deals with the operation of department or business as a Whole.	It is intensive, as it is applied to manufacturing of a product or providing a service.
Budgets are prepared for sales, production, cash etc.	It is determined by classifying recording and allocating expenses to cost unit.
It is a part of financial account, a projection of all financial accounts.	It is a part of cost account, a projection of all cost accounts.
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Budgets can be operated with standards.	This system cannot be operated without budgets.

Management Accounting - Essentials of Effective Budgeting

Essentials of Effective Budgeting:

A budgetary control system can prove successful only when certain conditions and attitudes exist, absence of which will negate to a large extent the value of a budget system in any business.

Such conditions and attitudes which are essential for effective budgeting are as follows:

a) Support of Top Management: If the budget system is to be successful, it must be fully supported by every member of the management and the impetus and direction must come from the very top management. No control system can

be effective unless the organisation is convinced that the top management considers the system to be import.

b) Participation by Responsible Executives: Those entrusted with the performance of the budgets should participate in the process of setting the budget figures. This will ensure proper implementation of budget programmes.

c) Reasonable Goals: The budget figures should be realistic and represent reasonably attainable goals. The responsible executives should agree that the budget goals are reasonable and attainable.

d) Clearly Defined Organisation: In order to derive maximum benefits from the budget system, well defined responsibility centers should be built up within the organisation. The controllable costs for each responsibility centres should be separately shown.**e) Continuous Budget Education:** The best way to ensure the active interest of the responsible supervisors is continuous budget education in respect of objectives, potentials & techniques of budgeting. This may be accomplished through written manuals, meetings etc., whereby preparation of budgets, actual results achieved etc., may be discussed.

f) Adequate Accounting System: There is close relationship between budgeting and accounting. For the preparation of budgets, one has to depend on the accounting department for reliable historical data which primarily forms the basis for many estimates. The accounting system should be so designed so as to set up accounts in terms of areas of managerial responsibility. In other words, responsibility accounting is essential for successful budgetary control.

g) Constant Vigilance: Reports comparing budget and actual results should be promptly prepared and special attention focused on significant exceptions i.e. figures that are significantly different from those expected.

h) Maximum Profit: The ultimate object of realizing the maximum profit should always be kept uppermost.

i) Cost of the System: The budget system should not cost more than it is worth. Since it is not practicable to calculate exactly what a budget system is worth, it only implies a caution against adding expensive refinements unless their value clearly justifies them.

j) Integration with Standard Costing System: Where standard costing system is also used, it should be completely integrated with the budget programme, in respect of both budget preparation and variance analysis.