DIRECTORATE OF DISTANCE & CONTINUING EDUCATION

MANONMANIAM SUNDARANAR UNIVERSITY

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BBA Course Material

Core-IV - ACCOUNTING FOR MANAGEMENT-II

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ACCOUNTING FOR MANAGEMENT-II

Unit-I

Cost Accounting – Meaning, Nature, Scope and Functions, Need, Importance and Limitations – Cost Concepts and Classification - Cost Sheets – Tenders & Quotations.

Unit-II

Management Accounting – Meaning, Nature, Scope and Functions, Need, Importance and Limitations – Management Accounting vs Cost Accounting, Management Accounting vs Financial Accounting, Analysis and Interpretation of Financial Statements – Nature, Objectives, Essentials and Tools, Methods – Comparative Statements, Common Size Statement and Trend Analysis.

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Unit-IV

Budgets and Budgetary Control – Meaning, Objectives, Merits and Demerits – Sales, Production, Flexible Budgets and Cash Budget.

Unit-V

Marginal Costing – CVP Analysis – Break Even Analysis.

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Introduction:

Costing is a branch of Accounting. It helps us to classify, record, and allocate the expenditure for the determination of costs of product. Expenditure involved in business has to be ascertained to fix the price of a product produced. The expenditure is to be understood in terms of material, labour and other direct and indirect expenses. The major purpose of such classification is to estimate the profit and to understand its relationship with costs and price. The three elements of a transaction i.e., cost, profit and price are necessary components of any business activity.

The management requires all information as seen in the example for each product produced. The above estimation is done for the purpose of planning, cost control and decision-making. The existing system of financial accounting does not provide the necessary information to do similar estimation. Such deficiency of financial accounting has given rise to the need of cost accounting.

Meaning of Cost

Cost: Institute of Cost and Works Accountants of India, defines cost as “measurement, in monetary terms, of the amount of resources used for the purpose of production of goods or rendering services”.

Thus the term cost means the amount of expenditure, actual or notional incurred or attributable to a given thing. It can be regarded as the price paid for attaining the objective. For e.g. Material cost is the price of materials acquired for manufacturing a product.

Meaning of Costing

The term costing has been defined as “the techniques and processes of ascertainment of costs. Whelden has defined costing as, “the classifying recording and appropriate allocation of expenditure for the determination of costs the relation of these costs to sale value and the ascertainment of profitability.”

Therefore costing involves the following steps.

- Ascertaining and Collecting of Costs

- Analysis or Classification of Costs
- Allocating total costs to a particular thing i.e. product, a contract, or a process.
- Thus costing simply means cost finding by any process or technique.

Meaning and Definition of Cost Accounting

Cost Accounting: Cost Accounting is a formal system of accounting by means of which cost of products or service, are ascertained and controlled.

Whelden defines Cost Accounting as, "Classifying, recording and appropriate allocation of expenditure for determination of costs of products or services and for the presentation of suitably arranged data for the purpose of control and guidance of management."

According to the **Institute of Management Accountants (IMA)**, Cost Accounting is "the process of collecting, analyzing, and evaluating cost data for the purpose of controlling costs, improving profitability, and developing budgets.

The American Accounting Association (AAA) defines Cost Accounting as "the process of identifying, measuring and analyzing the costs associated with producing and selling goods or services, with the aim of providing information for managerial decision-making."

Therefore, Cost Accounting is the application of costing principles, methods, and techniques in the ascertainment of costs and analysis of savings or/and excesses as compared with previous experience or with standards. It provides detailed cost information to various levels of management for the efficient performance of their functions. The information supplied by Cost Accounting is a tool of management for making optimum use of scarce resources and ultimately adds to the profitability of the business.

Nature of Cost Accounting

The nature of cost accounting is multifaceted and involves several key elements that are essential to understanding its purpose and function within an organisation.

Other Definitions of Cost Accounting

The word 'Costing' refers to the technique and process of ascertaining costs. There have been certain rules and principles in the field of costing developed over years by our forefathers. These rules and principles help us to ascertain the cost of products produced. The term 'Cost Accounting' refers to the recording of all incomes and expenditures and ends with the preparation of periodical statements and reports for ascertaining and controlling costs.

Cost accounting is a subset of accounting that develops detailed information about costs as they relate to units of output and to departments, primarily for purposes of providing inventory valuation (product costing) for financial statements, control, and decision making.

The terminology of cost accountancy published by the Institute of Cost and Management Accountants, London defines cost accountancy as "the application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and the ascertainment of profitability. It includes the presentation of information derived therefrom for the managerial decision-making."

On analysis of the above definition, the following features of cost accountancy become evident:

(a) "Cost Accountancy" is used in the broadest sense when compared to "cost accounting" and "costing". This is so because cost accountancy is concerned with the formulation of principles, methods and techniques to be applied for ascertaining cost and profit.

(b) Having ascertained 'cost' and 'profit', cost accountancy is concerned with presentation of information to management. To enable management to carry out its functions, reports must be promptly made available at the right time, to the right person and in a proper from.

(c) The information so provided is to serve the purpose of managerial decision-making such as introducing a new line of product, replacement of manual labour by machines, make or buy, decisions, etc.

Objectives of Cost Accounting

Objectives of Cost Accounting are as follows:

1) **To Ascertain the Cost:** To ascertain the cost of the product or services revealed and enable measurement of profit by the proper valuation of inventory.

2) **To Analyse Costs:** To analysis costs or to classify the expenses under different heads of accounts viz. material, labour, expenses, etc.

3) **To Allocate and Apportion the Costs:** To allocate or charge the direct expenses or specific costs such as Raw Material, Labour to a particular product, contract, or process and to distribute common expenses to each product, contract, or process on a suitable basis.

4) **Cost Reporting:** Cost Reporting or presentation includes:

a) What to report i.e. what is the nature of the information to be presented?

b) Whom to Report i.e. to whom the report is to be addressed.

c) When to Report i.e. when the report is to be presented i.e. Daily weekly monthly yearly etc.

d) How to Report i.e. in what format the report is to be presented.

5) **To Assist the Management:** Cost Accounting assists the management in:

a) Indicating to the management any inefficiencies and extent of various forms of waste of Raw Material, Time, Expenses, etc.

b) Fixing the selling price.

c) Providing information to enable management to take decisions of various types.

d) Controlling Inventory of Raw Material, goods in process, finished goods, spares and consumables etc.

6) **Cost Control:** Cost Accounting assists the management in cost control. Cost control includes the following stages.

a) Setting up targets of cast and production for each period.

b) Measuring the actual figures of performance relating to cost, production etc. for the period concerned.

c) The figures of actual performance are to be compared with the targets to find out the variation.
d) Analysing the variance, whether favourable or adverse.
e) Immediate action has to be taken in case of adverse variation.

7) **Optimum Product Mix:** Advise the management in deciding optimum product mix merits and demerits of alternative courses of action viz. make or buy decisions, introduction or Automation mechanization, rationalization, a system of production etc.

8) **Future Policies:** Advice management on future policies regarding Expansion, growth, capital investment, etc.

CONCEPT OF COST ACCOUNTING

Traditionally, cost accounting is considered as the technique and process of ascertaining costs of a given thing. In sixties, the definition of cost accounting was modified as 'the application of costing and cost accounting principles, methods and techniques to the science, art and practice of cost control and ascertainment of profitability of goods, or services'. It includes the presentation of information derived therefrom for the purpose of managerial decision making. It clearly emphasises the importance of cost accountancy achieved during the period by using cost concepts in more and more areas and helping management to arrive at good business decisions.

Today, the scope of cost accounting has enlarged to such an extent that it now refers to the collection and providing all sorts of information that assists the executives in fulfilling the organisational goals. Modern cost accounting is being termed as management accounting, since managers .being the primary user of accounting information are increasingly using the data provided by the accounts, setting objectives and controlling the operations of the business.

Nature of Cost Accounting:

Cost Accounting is an art or process of recording, analyzing and classifying of expenditure for the purpose of product costing or service costing, ascertainment of profitability, operational planning and cost control. It is a forward looking approach which is related to the recording, analyzing and classifying of expenditure with the objective of ascertaining the total and per unit cost of product or service.

Branch of Knowledge: It is an important branch of knowledge and emerges as a discipline in itself. It is an organize body of knowledge which has its own tools and techniques like

- Job costing
- Process costing
- Standard costing
- Marginal costing
- Variance analysis
- Unit costing
- Batch costing
- Activity based costing
- Budgetary control
- Contract costing etc.

Need and Scope of Cost Accounting

The scope of cost accounting involves the process of collecting, evaluating, and summarizing data about the costs of a service product, or activity. The industrial revolution of the nineteenth century led to the origin of cost accounting.

Cost Accounting involves the recording and classification of all such costs. Costs involve the prime cost, direct cost, factory cost, selling cost and more other costs. Classification allows the management of the costs and to ascertain the profitability of any such processes and further activities.

No clear idea of operating efficiency: Sometimes profits in an organization may be less or more because of inflation or trade depression and not due to efficiency or inefficiency. But financial accounting does not give a clear reason for profit or loss.

Weakness is not spotted out by collective results: Financial Accounting shows the net result of an organization. When the profit and loss account of an organization, shows less profit or a loss, it does not give the reason for it or it does not show where the weakness lies.

Does not help in fixing the price: In Financial Accounting, we get the total cost of production but it does not aid in determining prices of the products, services, production order, and lines of products.

No classification of expenses and accounts: In Financial Accounting, we don't get data relating to costs incurred by departments, processes separately or per unit cost of product lines, or cost incurred in various sales territories. Further expenses are not classified as direct or indirect, controllable and uncontrollable overheads and the value-added in each process is not reported.

No data for comparison and decision making: It does not supply useful data to management for comparison with the previous period and for taking various financial decisions as an introduction of new products, replacement of labor by machines, price in normal or special circumstances, producing a part in the factory or buying it from outside market, production of a product to be continued or given up, priority accorded to different products, investment to be made in new products or not, etc.

No control on cost: Financial Accounting does not help to control materials, supplies, wages, labor, and overhead costs.

Does not provide standards to assess the performance: Financial Accounting does not help in developing standards to assess the performance of various persons or departments. It also does not help in checking that costs do not exceed a reasonable limit for a given quantum of work of the requisite quality.

Provides only historical information: Financial Accounting records only the historical costs incurred. It does not provide day-to-day cost information to the management for making effective plans for the future.

No analysis of losses: It does not provide a complete analysis of losses due to defective material, idle time, idle plant and equipment, etc. In other words, no distinction is made between avoidable and unavoidable wastage.

Inadequate information for reports: It does not provide adequate information for reports to outside agencies such as banks, government, insurance companies, and trade associations.

No answer for certain questions: Financial Accounting will not help to answer questions like:-

(a) Should an attempt be made to sell more products or is the factory operating to capacity?

(b) If an order or contract is accepted, is the price obtainable sufficient to show a profit?

(c) If the manufacture or sale of product A were discontinued and efforts made to increase the sale of B, what would be the effect on the net profit?

(d) Why the profit of last year is of such a small amount despite the fact that output was increased substantially? Etc.

Function of Cost Accounting:

1. Cost Recording:

Cost accounting involves the systematic recording of all costs related to the production process, including direct materials, direct labor, and overhead costs. This recording provides a basis for analysis and decision-making.

2. Cost Classifications:

Costs are classified into different categories based on their nature, behavior, and relevance to decision-making. This classification helps in understanding cost structures and identifying cost drivers.

3. Cost Analyses:

Cost accountants analyze cost data to understand cost behavior, identify cost-saving opportunities, and evaluate the impact of different factors on costs. This analysis aids in making informed decisions regarding pricing, product mix, and resource allocation.

4. Cost Control:

Cost accounting helps in implementing measures to control and manage costs effectively. By setting standards, monitoring actual costs, and analyzing variances, organizations can identify areas of inefficiency and take corrective actions to control costs.

5. Budgeting and Planning:

Cost accountants play a key role in the budgeting and planning process by developing cost estimates, budgets, and forecasts. This helps in setting performance targets, allocating resources efficiently, and monitoring financial performance against predetermined goals.

6. Product Costing:

Cost accounting determines the cost of producing goods or services by allocating direct and indirect costs to individual products or services. This information is essential for pricing decisions, profitability analysis, and product mix optimization.

7. Inventory Control:

Cost accounting is used to value inventory on hand for financial reporting purposes and cost of goods sold calculations. Different costing methods such as FIFO, LIFO, or weighted average are employed for inventory valuation.

8. Performance Evaluations:

Cost accounting evaluates the performance of departments, products, or activities by comparing actual costs with budgeted or standard costs. Variances are analyzed to assess operational efficiency and identify areas for improvement.

9. Decision Support:

Cost accounting provides management with relevant cost information and analysis to support strategic and operational decision-making. This includes decisions such as make-or-buy, capital investments, pricing strategies, and cost reduction initiatives.

10. Reporting:

Cost accountants prepare various cost reports, analyses, and financial statements to communicate cost-related information to internal stakeholders (management, departments) and external stakeholders (investors, creditors, regulators).

Importance of Cost Accounting

Cost accounting has many advantages. Here are some of the ways it can help a business:

1. Controlling costs: Cost accounting helps the management foresee the cost price and selling price of a product or a service, which helps them formulate business policies. With cost value as a

reference, the management can come up with techniques to control costs with an aim to achieve maximum profitability.

2. Determining the total per-unit cost: Cost accounting techniques help in determining the total per-unit cost of a product or a service, so that the business can fix the selling price for it.

3. Showing profitable and non-profitable activities: This information helps the management put an end to non-profitable activities while developing and expanding the profitable ones.

4. Comparing costs over time: The data in the cost sheets prepared for various time periods helps in comparing the cost for the same product or a service over a period of time.

Cost Accounting is Science and an Art:

- Cost accounting is both science and an art but not a perfect science.
- It is science as it is a body of systematic knowledge relating to not only accounting but also to a wide variety of subjects such as law, office practices, data processing, production and material control etc.
- It is an art as it involves the use of the skills and experience of cost accountant in collection, classification and analysis of the costs of the products.

Cost Accounting is A Profession

Cost accounting is not a pure profession by nature but it is emerging as a profession. The set-up of various specialized institutions like is a way long to make cost accounting as a profession.

Based on Double Entry System

Cost accounting is based on the double entry system. It is follows the rule of 'every debit has equal credit.' All transactions that are recorded in the cost accounting records have two fold aspect.

A Process in Nature

Cost accounting is a process in nature. It is a process that involves the following steps:

- Identification of costs
- Recording of costs
- Classification of costs
- Analyzing the costs
- Interpreting the results
- Communicating the results to the management.

It is a forward looking approach that aims at improving the efficiency of the manufacturing activities.

Tools and Techniques

Cost accounting has its own tools and techniques of standard costing and variance analysis, contract costing, process costing, job costing, unit costing, batch costing, marginal costing etc. cost accounting make use of such techniques in preparing the accounting records with full accuracy and also fix the standards of performance for future.

Internal Accounting

Costing accounting is an internal accounting. There is no compulsion on the organization to prepare the cost accounting records and publish them. It is totally option to prepare the cost accounting records. These are prepared to provide for the internal use by the management and manufacturing departments.

Limitations of Cost Accounting:

1. Subjectivity:

Cost accounting involves judgment and estimation in allocating costs to products, departments, or activities. This subjectivity can lead to biases and inaccuracies in cost measurements.

2. Complexity:

Cost accounting systems can be complex and time-consuming to implement and maintain, especially in large organizations with diverse product lines and operations. This complexity may result in errors and inefficiencies in cost allocation and analysis.

3. Cost of Implementation:

Implementing and maintaining a cost accounting system requires financial resources, time, and expertise. Small businesses may find it challenging to afford the cost of implementing and operating a sophisticated cost accounting system.

4. Focus on Historical Data:

Cost accounting primarily relies on historical cost data, which may not always be relevant for decision-making in rapidly changing business environments. It may fail to capture future cost trends or emerging cost drivers.

5. Assumption of Stable Production:

Traditional cost accounting methods assume stable production levels and cost structures. However, in reality, production levels and cost structures may vary due to changes in demand, technology, or market conditions, rendering cost estimates less accurate.

6. Ignoring Non-Monetary Factors:

Cost accounting often focuses solely on monetary costs and may overlook non-monetary factors such as quality, customer satisfaction, employee morale, and environmental impact, which can also affect decision-making and performance evaluation.

7. Inflexibility:

Cost accounting systems may lack flexibility to adapt to changes in business processes or cost drivers. This inflexibility can hinder the ability of organizations to respond effectively to changing market conditions or strategic priorities.

8. Difficulty in Allocating Indirect Costs:

Allocating indirect costs (overhead) to products or services can be challenging and arbitrary. Different allocation methods can yield different results, leading to distortions in product costing and profitability analysis.

9. Potential for Manipulation:

Cost accounting data can be manipulated or distorted for managerial or political purposes. Managers may manipulate cost data to achieve favorable performance evaluations or to justify their decisions.

10. Inadequate for Some Types of Businesses:

Cost accounting may not be suitable for certain types of businesses, such as service-oriented businesses or those with highly variable and unpredictable costs. Traditional cost accounting methods may not accurately capture the cost dynamics in such environments.

CONCEPT AND CLASSIFICATION OF COST:

Costs can be classified in various ways depending on the context and purpose. Here are some common classifications of costs:

1. By Nature of Expenditure:

Direct Costs:

These are costs directly attributable to the production of goods or services. For example, raw materials, labor, etc.

Indirect Costs (Overheads):

These are costs that cannot be directly traced to the production of goods or services but are incurred to support the production process. For example, rent, utilities, administrative expenses, etc.

2. By Behavior in Relation to Production Volume:

Fixed Costs:

Costs that remain constant irrespective of the level of production or sales volume. For example, rent, salaries of permanent staff, etc.

Variable Costs:

Costs that vary in direct proportion to the level of production or sales. For example, raw materials, direct labor, etc.

Semi-Variable Costs:

Costs that have elements of both fixed and variable costs. For example, electricity bills which have a fixed component (base charge) and a variable component (usage charge).

3. By Time Horizon:

Short-Term Costs:

Costs that vary with the level of production in the short term. For example, raw materials, direct labor for temporary workers, etc.

Long-Term Costs:

Costs that are not easily adjustable in the short term and may change with changes in the scale of operations. For example, building a new factory, hiring permanent staff, etc.

4. By Traceability to Cost Object:

Direct Costs:

Costs that can be directly traced to a specific cost object, such as a product, service, department, etc.

Indirect Costs:

Costs that cannot be easily traced to a specific cost object and are allocated using allocation methods.

5. By Decision-Making Relevance:

Sunk Costs:

Costs that have already been incurred and cannot be recovered regardless of the future action taken. They are not relevant for decision-making.

Opportunity Costs:

The cost of the next best alternative foregone when a decision is made. It represents the benefits sacrificed by choosing one alternative over another.

Incremental Costs:

Also known as differential costs, these are the additional costs incurred or saved as a result of a specific decision.

Marginal Costs:

The additional cost incurred by producing one more unit of a product or service.

6. By Function:

Production Costs:

Costs directly related to the production process, including raw materials, labor, and factory overheads.

7. Administration Costs:

Costs associated with the general management and administration of the organization, including salaries of administrative staff, office supplies, etc.

8. Selling and Distribution Costs:

Costs associated with marketing, selling, and delivering products or services to customers, including advertising, sales commissions, transportation costs,

COST SHEETS:

A cost sheet, also known as a cost statement or cost card, is a document that provides a detailed breakdown of all the costs incurred in the production of a product or the provision of a service. It serves as an essential tool for management in analyzing the cost structure of a business, evaluating the profitability of products or services, and making informed decisions regarding pricing, cost control, and resource allocation.

Cost Sheet includes the following elements:

1. Direct Materials:

The cost of raw materials or components directly used in the production process. It may include the quantity, unit cost, and total cost of each material item

2. Direct Labor:

The cost of labor directly involved in the production process, typically expressed in terms of wages or salaries paid to workers.

3. Direct Expenses:

Other direct costs incurred specifically for the production of goods or services, such as subcontracting costs, packaging costs, etc.

4. Prime Cost:

The total of direct materials, direct labor, and direct expenses. It represents the direct costs directly attributable to the production of goods or services.

5. Factory Overheads:

Indirect costs associated with the production process but cannot be directly traced to specific units of production. These may include factory rent, utilities, depreciation of machinery, maintenance costs, etc.

6. Total Manufacturing Cost:

The sum of prime cost and factory overheads. It represents the total cost of manufacturing the goods or providing the services.

7. Administration Overheads:

Indirect costs associated with general administrative functions of the business, such as salaries of administrative staff, office expenses, etc.

8. Selling and Distribution Overheads:

Indirect costs associated with marketing, selling, and distributing the products or services, such as advertising expenses, sales commissions, transportation costs, etc.

9. Total Cost:

The sum of total manufacturing cost, administration overheads, and selling and distribution overheads. It represents the total cost incurred by the business in producing and selling its products or services.

10. Profit:

The difference between total revenue and total cost, representing the amount of profit generated from the sales of products or services.

Tenders & Quotations:

1. Tenders:

A tender is an invitation for bids or proposals to provide goods or services. Organizations, typically government agencies or large corporations, issue tenders when they need to purchase goods or services beyond a certain value. Tenders outline the requirements, specifications, terms, and conditions of the procurement, and interested parties submit their bids or proposals in response. Tenders are often advertised publicly to ensure transparency and competition. The entity issuing the tender evaluates the bids received and selects the most suitable supplier based on various factors such as price, quality, and compliance with requirements.

2. Quotations:

A quotation is a formal statement provided by a supplier or vendor in response to a request for quotation (RFQ) or request for proposal (RFP). Unlike tenders, which are usually issued for larger contracts, quotations are often used for smaller purchases or services. A request for quotation typically includes details such as the quantity of goods or services required, specifications, delivery terms, and any other relevant information. Suppliers then provide quotations indicating the price, terms, and conditions under which they are willing to supply the requested goods or services. The requester evaluates the quotations received and selects the supplier offering the best value or meeting the requirements.

Unit –II

Meaning of Management Accounting:

Management accounting also is known as managerial accounting .It is a process of providing financial information and resources to the managers in decision making. Management accounting is only used by the internal team of the organization, and this is the only thing which makes it different from financial accounting. In this process, financial information and reports such as invoice, financial balance statement is shared by finance administration with the management team of the company. Objective of management accounting is to use this statistical data and take a better and accurate decision, controlling the enterprise, business activities, and development.

Financial accounting is the recording and presentation of information for the benefit of the various stakeholders of an organization. Management accounting, on the other hand, is the presentation of financial data and business activities for the internal management of the organization. In this article, we will learn what is management accounting and its functions.

Nature of Management Accounting:

1. Internal Focus:

Management accounting primarily serves the internal management of an organization. It provides information and analysis tailored to the needs of managers for decision-making, planning, control, and performance evaluation within the organization.

2. Future Orientation:

While financial accounting primarily deals with historical data, management accounting emphasizes the use of forward-looking information to support planning, budgeting, forecasting, and decision-making for future periods.

3. Flexibility:

Management accounting systems are designed to be flexible and adaptable to the specific needs and requirements of different levels of management and various departments within the organization. It allows for customization to address unique circumstances and changing business conditions

4. Decision Support:

One of the primary objectives of management accounting is to provide relevant, timely, and reliable information to support decision-making processes within the organization. This includes analyzing data, conducting cost-benefit analysis, evaluating alternatives, and providing insights to facilitate informed decision-making.

5. Integration with Operations:

Management accounting is closely integrated with the operational activities of the organization. It involves the analysis of costs, revenues, and performance metrics related to the production, distribution, marketing, and other operational functions to help optimize resource allocation and improve efficiency.

6. Use of Non-Financial Information:

While financial data is important, management accounting also incorporates non-financial information such as customer satisfaction, employee productivity, quality measures, and market trends to provide a comprehensive view of organizational performance.

7. Emphasis on Value Creation:

Management accounting focuses on creating value for the organization by identifying opportunities for cost reduction, revenue enhancement, and strategic investments. It helps management allocate resources effectively to maximize shareholder wealth and achieve organizational goals.

8. Continuous Improvement:

Management accounting systems are dynamic and subject to continuous improvement and refinement. They evolve in response to changes in the business environment, technological advancements, and emerging best practices to remain relevant and effective over time.

Scope of Management Accounting:

1. Cost Accounting:

Cost accounting is a fundamental aspect of management accounting that involves the identification, measurement, analysis, and allocation of costs associated with producing goods or services. This includes determining the cost of raw materials, labor, overhead, and other expenses to assess product or service profitability, pricing decisions, and cost control measures.

2. Budgeting and Forecasting:

Management accountants play a crucial role in preparing budgets and forecasts to plan and control organizational activities. This involves setting financial targets, allocating resources, and estimating future revenues, expenses, and cash flows to guide decision-making and performance evaluation.

3. Performance Measurement and Evaluation:

Management accounting involves developing key performance indicators (KPIs) and performance measurement systems to assess the efficiency and effectiveness of various aspects of organizational operations. This may include analyzing financial ratios, operational metrics, customer satisfaction scores, and other performance indicators to evaluate performance against goals and benchmarks.

4. Decision Support:

Management accountants provide information and analysis to support decision-making processes within the organization. This includes conducting cost-benefit analysis, evaluating investment proposals, assessing pricing strategies, and identifying opportunities for cost reduction or revenue enhancement to help management make informed decisions.

5. Strategic Planning and Management:

Management accounting contributes to strategic planning and management by providing financial analysis and insights to help senior management formulate long-term goals and strategies.

This may involve analyzing market trends, evaluating competitive positioning, identifying growth opportunities, and assessing the financial implications of strategic decisions.

6. Risk Management:

Management accounting includes assessing and managing risks that may impact the organization's financial performance and objectives. This involves identifying potential risks, evaluating their likelihood and potential impact, developing risk mitigation strategies, and monitoring risk exposure to safeguard organizational assets and interests.

7. Internal Reporting and Communication:

Management accountants are responsible for preparing internal reports and communicating financial and non-financial information to various levels of management within the organization. This includes presenting financial analysis, performance reports, budget variances, and other relevant information to support decision-making and facilitate communication and coordination among different departments and functions.

8. Continuous Improvement:

Management accounting encompasses a commitment to continuous improvement and innovation in processes, systems, and practices to enhance organizational performance and effectiveness. This involves staying abreast of developments in accounting standards, technology, and best practices, and proactively seeking opportunities to optimize resource allocation, streamline processes, and improve decision-making capabilities.

Functions of Management Accounting:

The basic function of management accounting is to assist the management in performing its functions effectively. The functions of the management are planning, organizing, directing and controlling. Management accounting helps in the performance of each of these functions in the following ways:

1. Provides data:

Management accounting serves as a vital source of data for management planning. The accounts and documents are a repository of a vast quantity of data about the past progress of the enterprise, which are a must for making forecasts for the future.

2. Modifies data:

The accounting data required for managerial decisions is properly compiled and classified. For example, purchase figures for different months may be classified to know total purchases made during each period product-wise, supplier-wise and territory-wise.

3. Analyses and interprets data:

The accounting data is analyzed meaningfully for effective planning and decision-making. For this purpose the data is presented in a comparative form. Ratios are calculated and likely trends are projected. Serves as a means of communicating: Management accounting provides a means of communicating management plans upward, downward and outward through the organization. Initially, it means identifying the feasibility and consistency of the various segments of the plan. At later stages it keeps all parties 4 informed about the plans that have been agreed upon and their roles in these plans.

5. Facilitates control:

Management accounting helps in translating given objectives and strategy into specified goals for attainment by a specified time and secures effective accomplishment of these goals in an efficient manner. All this is made possible through budgetary control and standard costing which is an integral part of management accounting.

6. Uses also qualitative information:

Management accounting does not restrict itself to financial data for helping the management in decision making but also uses such information which may not be capable of being measured in monetary terms. Such information may be collected form special surveys, statistical compilations, engineering records, etc.

Need for Management Accounting:

1. Decision-Making Support:

Management accounting provides relevant, timely, and accurate information to support decision-making at all levels of the organization. This includes strategic decisions such as investment choices, as well as operational decisions such as pricing strategies, product mix, and cost control measures**.**

2. Resource Allocation:

By providing insights into the costs and benefits associated with various alternatives, management accounting helps organizations allocate resources effectively. This ensures that resources are deployed in ways that maximize value and contribute to achieving organizational goals.

3. Performance Evaluation:

Management accounting enables organizations to assess their performance against established goals and benchmarks. By analyzing financial and non-financial metrics, management accountants help identify areas of strength and weakness, leading to informed decisions aimed at improving performance.

4. Planning and Control:

Management accounting supports the planning process by providing budgets, forecasts, and other planning tools that guide resource allocation and goal setting. It also facilitates control by monitoring actual performance against plans, identifying variances, and taking corrective actions as needed to stay on track.

5. Strategic Management:

Management accounting plays a crucial role in strategic management by providing financial analysis and insights that inform strategic decisions. This includes evaluating market trends, assessing competitive positioning, and identifying opportunities for growth and expansion.

6. Cost Management:

Management accounting helps organizations manage costs effectively by identifying cost drivers, analyzing cost structures, and implementing cost control measures. This enables organizations to improve efficiency, enhance profitability, and maintain competitiveness in the market.

7. Risk Management:

Management accounting contributes to risk management by assessing and managing risks that may impact the organization's financial performance and objectives. By identifying and evaluating risks, management accountants help develop strategies to mitigate risks and safeguard organizational interests.

8. Communication and Coordination:

Management accounting facilitates communication and coordination among different departments and functions within the organization. By preparing internal reports and communicating financial and non-financial information, management accountants ensure that relevant stakeholders have access to the information they need to make informed decisions and collaborate effectively.

Importance of Management Accounting:

1. Decision Support:

Management accounting provides relevant and timely information to help managers make informed decisions. Whether it's evaluating investment opportunities, setting pricing strategies, or assessing cost-saving initiatives, management accounting equips decision-makers with the necessary data and analysis to choose the most appropriate course of action.

2. Resource Allocation:

Effective resource allocation is crucial for organizational success. Management accounting assists in allocating resources such as capital, labor, and materials efficiently by identifying cost-effective alternatives and evaluating their potential benefits.

3. Performance Evaluation:

Management accounting helps evaluate the performance of various departments, projects, and activities within an organization. By comparing actual results against budgets, forecasts, and performance targets, management accountants enable managers to identify areas of improvement and take corrective actions as needed.

4. Planning and Control:

Planning and control are essential functions in managing organizational activities. Management accounting provides tools such as budgets, forecasts, and variance analysis to help organizations plan future operations and monitor performance against predefined objectives. This enables proactive management and ensures that the organization stays on track to achieve its goals.

5. Strategic Management:

Management accounting plays a crucial role in strategic decision-making by providing financial analysis and insights to support long-term planning. By assessing market trends, evaluating competitive positioning, and identifying growth opportunities, management accountants help senior management formulate and execute strategic plans effectively.

6. Cost Management:

Controlling costs is vital for maintaining profitability and competitiveness. Management accounting helps identify cost drivers, analyze cost structures, and implement cost reduction initiatives to improve efficiency and profitability. This enables organizations to optimize their cost structures while maintaining the quality of products and services.

7. Risk Management:

Managing risks is essential for mitigating potential threats and seizing opportunities. Management accounting contributes to risk management by identifying and assessing risks, developing strategies to mitigate them, and monitoring risk exposure over time. This helps organizations minimize potential losses and capitalize on opportunities in a dynamic business environment.

8. Communication and Coordination:

Effective communication and coordination are critical for aligning organizational efforts towards common goals. Management accounting facilitates communication by providing internal reports and analysis to different levels of management, enabling stakeholders to understand performance, make informed decisions, and collaborate effectively.

Limitation of Management Accounting:

1. Subjectivity:

Management accounting involves subjective judgments and estimations, particularly in areas such as budgeting, forecasting, and performance evaluation. This subjectivity can introduce biases and errors into the decision-making process, leading to suboptimal outcomes.

2. Reliance on Historical Data:

Management accounting primarily relies on historical data to analyze past performance and make projections for the future. However, historical data may not always be indicative of future trends, especially in rapidly changing business environments or during periods of economic uncertainty.

3. Focus on Financial Measures:

Management accounting tends to focus primarily on financial measures and may not adequately capture non-financial factors that are important for organizational success, such as customer satisfaction, employee morale, and environmental impact. This narrow focus can limit the effectiveness of decision-making and performance evaluation processes.

4. Cost Allocation Challenges:

Allocating costs to products, services, or departments can be challenging and may involve arbitrary allocations that do not accurately reflect the true cost drivers. This can distort cost analysis and lead to incorrect decisions regarding pricing, product mix, and resource allocation.

5. Time and Cost Constraints:

Developing and maintaining management accounting systems can be time-consuming and costly, particularly for small and medium-sized enterprises with limited resources. Organizations may need to strike a balance between the benefits of management accounting and the costs of implementing and maintaining such systems.

6. Overemphasis on Short-Term Results:

Management accounting often focuses on short-term performance measures, such as quarterly profits or monthly sales figures, which may incentivize managers to prioritize short-term gains over long-term sustainability and growth.

7. Lack of Integration with Strategy:

Management accounting systems may not always be effectively integrated with the organization's strategic objectives and goals. This can result in a disconnect between strategic planning and operational decision-making, leading to inefficiencies and missed opportunities.

8. Resistance to Change:

Implementing management accounting practices may face resistance from employees who are accustomed to traditional accounting methods or who perceive changes as threatening. Overcoming resistance to change and ensuring buy-in from all stakeholders can be a significant challenge.

Different Between Cost Accounting and Management Accounting:

Aspect	Cost Accounting	Management Accounting
Meaning	Control and calculation of costs inside the organisation.	Provision of non-financial as well as financial information for the purpose of decision-making at the managerial level.
Information Type	The focus is primarily on information related to cost	Involves both non-financial and financial information for making decisions strategically.
Objective	Determination of cost analysis, cost control, and overall costs.	Assisting planning, managerial decision-making as well as control.
Scope	The primary concentration is on the incurred cost of production and activities related to cost.	Entertains a broader focus encompassing finance and financial aspects like evaluation of performance and planning strategically.
Specific Procedure	Involvement of several methods like job, process, and activity-based costing.	Involves variance analysis, budgeting, investment analysis, and forecasting, among others.

Recording	Puts emphasis on the recording and analysis of the incurred cost	Analysis and records different non-financial and financial data for the purpose of management.
Planning	Helps in price planning, cost planning, and planning of various cost-control measures.	Ensures resource allocation. strategic planning, and budgeting.
Interdependency	Offers necessary input for the processes concerning management accounting.	Makes use of accounting data

Different Between Financial Accounting and Management Accounting:

BASIS FOR COMPARISON	**FINANCIAL ACCOUNTING**	**MANAGEMENT ACCOUNTING**
Meaning	Financial Accounting is an accounting system that focuses on the preparation of a financial statement of an organization to provide financial information to the interested parties.	The accounting system which provides relevant information to the managers to make policies, plans and strategies for running the business effectively is known as Management Accounting.
Orientation	Historical	Future
Users	Both internal and external users	Only internal users
Nature of statements prepared	General-purpose financial statements	Special purpose financial statements
Rules	Rules of GAAP are followed	No fixed rules for the preparation of reports
Reports	Only financial aspects	Both financial and non-financial aspects
Time Span	Financial statements are prepared for a fixed period, i.e. one year.	Management Reports are prepared whenever needed.
Objective	To create periodical reports	To assist internal management in planning and decision-making process by providing detailed information on various matters.
Publishing and auditing	Required to be published and audited by statutory auditors	It is not meant to be published or audited. It is for internal use only.
Format	Specified	Not Specified

Analysis and Interpretation of Financial Statement:

1. Financial Statement Meaning:

Every business concern wants to know the various financial aspects for effective decision making. The preparation of financial statement is required in order to achieve the objectives of the firma s a whole. The term financial statement refers to an organized collection of data on the basis of accounting principles and conventions to disclose its financial information. Financial statements are broadly grouped in to two statements:

I. Income Statements (Trading, Profit and Loss Account)

II. Balance Sheets

In addition to above financial statements supported by the following statements are prepared to meet the needs of the

Business concern:

(a) Statement of Retained Earnings

(b) Statement of Changes in Financial Position

2. Importance of Financial Statement:

Income Statements:

The term 'Income Statements' is also known as Trading, Profit and Loss Account. This is the first stage of preparation of final accounts in accounting cycle. The purpose of preparing Trading, Profit and Loss Accounts to ascertain the Net Profit or Net Loss of a business concern during the accounting period

Balance Sheet:

Balance Sheet may be defined as "a statement of financial position of any economic unit disclosing as at a given moment of time its assets, at cost, depreciated cost, or other indicated value, its liabilities and its ownership equities." In other words, it is a statement which indicates the financial position or soundness of a business concern at a specific period of time. Balance Sheet may also be described as a statement of source and application of funds because it represents the source where the funds for the business were obtained and how the funds were utilized in the business.

Statement of Retained Earnings:

This statement is considered to be as the connecting link between the Profit and Loss Account and Balance Sheet. The accumulated excess of earning over losses and dividend is treated as Retained Earnings. The balance of retained earnings shown on the Profit and Loss Accounts and it is transferred to liability side of the balance sheet.

Statement of Changes in Financial Position:

Income Statements and Balance sheet do not disclose the operational efficiency of the concern. In order to measure the operational efficiency of the e concern it is essential to identify the movement of working capital of cash inflow or cash outflow of the business concern during the Particular period. To highlight the changes of financial position of a particular firm, the statement is prepared may emphasize of the

Following aspects:

1. Fund How Statement is prepared to know the changes in the firm's working capital.

2. Cash Flow Statement is prepared to understand the changes in the firm's cash position.

3. Statement of Changes in Financial Position is used for the changes in the firm's total financial position.

Nature of Financial Statement:

Financial Statements are prepared on the basis of business transactions recorded in the books of Original Entry or Subsidiary Books, Ledger, and Trial Balance. Recording the transactions in the books of primary entry supported by document proofs such as Vouchers, Invoice Note etc.

According to the American Institute of Certified Public Accountants, "Financial Statement reflects a combination of recorded facts, accounting conventions and personal judgments and conventions applied which affect them materially." It is therefore, nature and accuracy of the data included in the financial

Statements which are influenced by the following factors:

(1) Recorded Facts.

(2) Generally Accepted Accounting Principles.

(3) Personal Judgments.

(4) Accounting Conventions

Objectives of Financial Statements:

The following are the important objectives of financial statements:

1. To provide adequate information about the source of finance and obligations of the finance firm.

2. To provide reliable information about the financial performance and financial soundness of the concern.

3. To provide sufficient information about results of operations of business over a period of time.

4. To provide useful information about the financial conditions of the business and movement of resources in and out of business.

5. To provide necessary information to enable the users to evaluate the earning performance of resources or managerial

Essential Tools and Methods:

Financial statements are prepared to meet external reporting g obligations and also for decision making purposes. They play dominant role in setting the framework of managerial decisions. As the information provided in the financial statements is not an end in itself as no meaningful conclusions can be drawn from these statements alone. However, the information provided in the financial statements is of immense use in making decisions through analysis and interpretation of financial statements. To overcome from the limitations it becomes necessary to analyse the financial statements. The analytical tools generally available to an analyst for this purpose are:

1. Comparative Financial and Operating Statements

2. Common-Size Statement

3. Trend ration and Trend Analysis

4. Average Analysis

5. Change in Working Capital

6. Fund-Flow and Cost-Flow Analysis

7. Ratio Analysis

Comparative Statements:

Meaning of Comparative Statement:

The comparative statements are an important tool of horizontal financial analysis. Financial data become more meaningful when compared with similar data for previous period or a number of previous periods. Such analysis helps as in forming an opinion regarding the progress of the enterprise.

Definition of Comparative Statement:

Foulke has defined these statement as "statement of financial position of business so designed as to provide time perspective to the consideration of various elements of financial position embodied in such statement.''

Importance of Comparative Statement:

Following points explain the importance of these statements:

1. These statements are very useful in measuring the effect of the conduct of a business enterprise over the period under consideration. Regardless of its financial strength at a given point of time, the enterprises must operate successfully if it hopes to continue as a going concern.

2. The income statement measures the effects of operation. But the progress of these operations may be viewed over number of periods by preparing the income statement in a comparative form.

3. Similarly the effect of operation of financial position and the progress of a business in term of financial position can be presented by means of a comparative balance sheet.

4. The accounting authorities in U. S. A. have strongly recommended and encouraged the preparation of financial statement in the comparative from Recognising the importance of comparative financial date for two years.

5. The Indian companies Act 1956 has made this fact compulsory that in the balance sheet of a company the figure for the previous year should also be given to facilitate comparison. Though the balance sheet is a useful statement, the comparative balance sheet is even more useful for the contains not only the data of a single balance sheet but also for the past years which may be useful in studying the trends.

Problem-1

From the following Balance Sheet, Prepare Comparative Balance Sheet of Sun Ltd.

Particulars	31.12.2021	31.12.2022
I Equity & Liabilities 1. Shareholders' Funds		
a) Share Capital	350000	300000
2. Non-Current Liabilities Long Term Borrowings	100000	200000
3. Current Liabilities: Trade Payables	150000	100000
Total	600000	600000
II. Assets		
1. Non-Current Assets Fixed Assets (Tangible)	400000	300000
2. Current Assets Trade Receivables	200000	300000
Total	600000	600000

In the Books of Sun Ltd. Comparative Balance Sheet as on 31.03.2021 & 31.03.2022

Particulars	**2021 (₹)**	**2022 (₹)**	**Change (₹)**	**Change (%)**
I. Equity & Liabilities				
1. Shareholder's Funds a. Share Capital	300000	350000	50000	16.67
Shareholders Fund	300000	350000	50000	16.67
2. Non-Current Liabilities a. Long Term Borrowings	200000	100000	(100000)	(50.00)
3.Current Liabilities a. Trade Payables	100000	150000	50000	50.00
Total	600000	600000	-	-

II. Assets				
1. Non-Current Assets a. Fixed Assets (Tangible)	300000	400000	100000	33.33
2. Current Assets	300000	200000	(100000)	(33.33)
Total	600000	600000	-	-

Problem-2

ABC Limited has supplied the following information on its two fiscal quarters. i.e., 2019 and 2020.

Comparative Income Statement meaning and its key findings:

Particulars	2019 (Amount in INR)	2020 (Amount in INR)
Net Sales	₹2,00,000	₹2,50,000
Cost of Goods Sold	₹50,000	₹1,80,000
Selling, General and Administrative Expenses	₹25,000	₹30,000
Other Income	₹12,000	₹18,000
Taxes	₹8000	₹16,000
Interest	₹17,000	₹18,000

Solution:

ABC Limited's comparative income statement format for the fiscal years ended 2019 and 2020.

Particulars	2019 (Amount in INR)	2020 (Amount in INR)	Absolute Change	Percentage Change
Net Sales	₹2,00,000	₹2,50,000	₹50,000	25%
Less: Cost of Goods Sold	₹1,50,000	₹1,80,000	₹30,000	20%
Gross Profit	₹50,000	₹70,000	₹20,000	40%
Less: Selling, General and Administrative Expenses	₹25,000	₹30,000	₹5,000	20%
Net Operating Profit	₹25,000	₹40,000	₹15,000	60%
Add: Other Income	₹12,000	₹18,000	₹6000	50%
Earnings before Interest and Taxes	₹37,000	₹58,000	₹21,000	56.76%
Less: Interest	₹17,000	₹18,000	₹1000	5.88%
Earnings before Taxes	₹20,000	₹40,000	₹20,000	100%
Less: Taxes	₹8000	₹16,000	₹8000	100%
Net Profit	₹12,000	₹24,000	₹12,000	100%

Based on ABC Limited's Comparative Income Statement, it is possible to examine how a 25% rise in sales has influenced net profit and how various line items have contributed. The following are examples of basic analysis:

- Over the course of the year, net sales climbed by 25%.
- During this time, the gross profit ratio grew from 25% to 28%.
- Over the course of the year, the Net Profit Ratio climbed from 6% to 9%.
- Income tax expenses doubled, while interest costs grew by 5.88%.

Thus, we can see how the comparative income statement assists in determining changes in various components of costs and identifying the reasons for changes, which aids management in future decision-making.

Common Size Statement:

Financial statements that depict financial data in the shape of vertical statement percentage are known as common size statements. Such statements provide readers with vertical analysis of the profit and loss account and balance sheet. In such statement all figure are converted to a common unit by expressing than as percentage of a key figure in the statement. The total of financial statement is reduced to 100 and each item is shown as component to the whole. For example profit and loss account, the figure of each item of the financial year expressed as a percentage of sales likewise, assets and liabilities can be shown as percentage of total assets and total equities respectively in common sized balance sheet. Thus expressing each monetary item of financial statements a percentage of some total of which that item as apart transforms a financial statement what is referred as common size statement such a statement show the relative significance of the items contend in the financial statement and facilitate comparisons. It point out efficiencies and in efficiencies that are otherwise difficult to see and of this reason is a valuable management tool a common size statement is especially useful when data for more than one year are used.

Prepare common size Balance Sheet of XRI Ltd. from the following information

Particulars	Note No.	March 31, 2016	March 31, 2017
I. Equity and Liabilities			
1. Shareholders' Fund			
a) Share capital		15,00,000	12,00,000
b) Reserves and surplus		5,00,000	5,00,000
2. Non-current liabilities			
Long-term borrowings		6,00,000	5,00,000
3. Current liabilities			
Trade Payable		15,50,000	10,50,000
Total		**41,50,000**	**32,50,000**
II. Assets			
1. Non-current assets			
a) Fixed assets			
- Tangible asset			
Plant & machinery		14,00,000	8,00,000
- Intangible assets			
Goodwill		16,00,000	12,00,000
b) Non-current investments		10,00,000	10,00,000
2. Current assets			
Inventories		1,50,000	2,50,000
Total		**41,50,000**	**32,50,000**

Common size Balace Sheet of XRI Co. Ltd.
as at March 31, 2016 and March 31, 2017:

Particulars	Absolute Amounts		Percentage of Total Assets	
	31.03.2016	31.03.2017	31.03.2016	31.03.2017
	(Rs.)	(Rs.)	(%)	(%)
I. Equity and Liabilities				
1. Shareholders fund				
a) Share capital	15,00,000	12,00,000	36.14	36.93
b) Reserve and surplus	5,00,000	5,00,000	12.05	15.38
2. Non-current liabilities				
Long-term borrowings	6,00,000	5,00,000	14.46	15.38
3. Current liabilities				
Trade payables	15,50,000	10,50,000	37.35	32.31
Total	**41,50,000**	**32,50,000**	**100**	**100**
II. Assets				
1. Non-current assets				
a) Fixed assets				
- Tangible asset				
Plant & machinery	14,00,000	8,00,000	33.73	24.62
- Intangible assets				
Goodwill	16,00,000	12,00,000	38.55	36.92
Non-current investments	10,00,000	10,00,000	24.10	30.77
2. Current assets				
Inventories	1,50,000	2,50,000	3.62	7.69
Total	**41,50,000**	**32,50,000**	**100**	**100**

Trend Analysis:

Trend analysis is an important and useful technique of analysis and interpretation of financial statement. Under this technique the ration of different items for various periods are calculate for the company over a definite period of time say three to five years and then we can analysis trend highlighted by this ratio. Trend analysis can be done in following way:

i) Trend Percentage,

ii) Trend Ratio,

iii) Graphic and Diagrammatic Representation.

Trend analysis, also known as trend forecasting or trend tracking, is a method used to identify and analyze patterns and shifts in data over time. It is applied in various fields, including finance, business, economics, fashion, technology, and social sciences, to understand and anticipate changes or developments in specific areas. Here are the key aspects and steps involved in trend analysis:

1. Data Collection: The first step in trend analysis is to gather relevant data. This data can come from various sources, including historical records, surveys, market research, social media, and more. The quality and accuracy of the data are crucial for meaningful trend analysis.
2. Data Preprocessing: Raw data often requires cleaning and preprocessing to remove errors, outliers, or inconsistencies. Data should be organized and formatted in a way that makes it suitable for analysis.
3. Data Visualization: Visualizing data through charts, graphs, and other visual representations can help identify trends more easily. Common visualization tools include line charts, bar graphs, scatter plots, and heatmaps.
4. Time Series Analysis: Trend analysis often involves the examination of time series data, where observations are recorded at regular intervals over time. Time series analysis techniques, such as moving averages, exponential smoothing, and autoregressive models, can help uncover trends and patterns.
5. Trend Identification: Analysts look for recurring patterns or trends in the data. Trends can be classified into various categories, including upward trends (increasing over time),

downward trends (decreasing over time), and cyclical trends (repeating patterns over a specific time frame).

6. Seasonality Analysis: In addition to trends, seasonality can also be present in data. Seasonal patterns repeat at regular intervals, often tied to seasons, holidays, or other calendar events. Identifying and accounting for seasonality is important for accurate trend analysis.
7. Statistical Analysis: Statistical techniques, such as regression analysis, hypothesis testing, and correlation analysis, can be used to quantify and validate trends. These methods help assess the significance of observed patterns.
8. Expert Judgment: In some cases, trend analysis may involve expert judgment and domain-specific knowledge. Experts can provide insights that quantitative analysis alone may not capture.
9. Forecasting: After identifying and analyzing trends, the next step is to use this information for forecasting future developments. Various forecasting methods, including time series forecasting models and scenario planning, can be applied to predict future trends.
10. Monitoring and Adaptation: Trend analysis is an ongoing process. Once trends are identified and forecasts are made, it's important to continuously monitor the data and adjust strategies accordingly as new information becomes available.

Trend analysis can be a valuable tool for businesses and organizations to make informed decisions, stay competitive, and adapt to changing circumstances. It helps in understanding consumer preferences, market dynamics, and emerging opportunities or threats. However, it's important to acknowledge that trends are not guaranteed predictions of the future but rather informed projections based on historical data and analysis.

Unit –III

Ratio Analysis:

Meaning of Ratio Analysis:

Ratio analysis is a financial analysis technique used to evaluate the relationship between different financial variables in a company's financial statements. It involves calculating various ratios based on the information provided in the balance sheet, income statement, and cash flow statement. These ratios help assess the company's financial performance, profitability, liquidity, solvency, efficiency, and market valuation.

The main purpose of ratio analysis is to provide insights into the financial health and performance of a company, helping investors, creditors, management, and other stakeholders make informed decisions. By comparing ratios over time, against industry benchmarks, or with competitors, analysts can identify trends, strengths, weaknesses, and areas for improvement within the company.

Definition of Ratio Analysis:

"Ratio analysis is the method of comparing and interpreting numerical relationships between different financial variables in a company's financial statements. It helps assess the company's financial performance, health, and efficiency."

Objectives of Ratio Analysis:

The accounting ratios are very useful in assessing the performance of business enterprise i.e. financial position and profitability. This is possible to achiever by comparison of ratios of the year or with the previous year.

The ratios are worked out to analyse the following aspect or areas of business organization.

1. Solvency: -

a. Long-term solvency

b. Short-term solvency

c. Immediate solvency

2. Stability

3. Profitability

4. Operational efficiency

5. Credit standing

6. Structural analysis.

7. Utilization of resources and

8. Leverage or external financing.

The ratios are useful for the following parties.

1) Investors, both present as well as potential investors.

2) Financial analysist.

3) Stock broker and stock exchange authorities.

4) Government.

5) Tax Department.

6) Competitors

7) Research analysist and students.

8) Creditors and supplier.

9) Banks and financial institutions.

10) Company's management.

11) Finance managers

12) Mutual funds.

13) Other interested parties like credit rating agencies.

Benefits of Ratio Analysis:

1. Financial Performance Evaluation:

Ratio analysis provides a comprehensive overview of a company's financial performance, allowing stakeholders to assess profitability, liquidity, solvency, and efficiency. It helps in identifying strengths and weaknesses within the organization.

2. Comparison with Industry Benchmarks:

Ratios allow for comparisons of a company's financial performance with industry benchmarks or competitors. This helps stakeholders understand how the company stacks up against its peers and identify areas where it may need improvement.

3. Trend Analysis:

By analyzing ratios over multiple periods, stakeholders can identify trends and patterns in the company's financial performance. This helps in evaluating the effectiveness of management strategies and forecasting future performance.

4. Decision Making:

Ratio analysis provides valuable insights for decision-making processes. Investors can use ratios to assess the investment potential of a company, while creditors can evaluate its creditworthiness. Management can use ratios to monitor performance and make strategic decisions.

5. Identifying Financial Problems:

Ratios can help identify early signs of financial distress or inefficiency within the organization. For example, declining profitability ratios or deteriorating liquidity ratios may indicate underlying problems that require attention.

6. Communication Tool:

Ratio analysis serves as a communication tool between management and external stakeholders. It helps management convey the company's financial performance and strategy to investors, creditors, and analysts in a clear and concise manner.

7. Performance Measurement:

Ratios provide key performance indicators that can be used to track progress towards financial goals and objectives. By setting benchmarks and targets, management can measure performance and take corrective actions as needed.

8. Forecasting and Planning:

Ratio analysis aids in financial forecasting and planning. By understanding past trends and relationships between financial variables, stakeholders can make more accurate predictions about future performance and plan accordingly.

9. Facilitates Ratio Analysis:

Ratio analysis also helps in evaluating the effectiveness of management strategies and forecasting future performance.

Limitations of Ratio Analysis:

1. Dependence on Historical Data:

Ratio analysis relies on historical financial data, which may not accurately reflect current market conditions or future performance. Past trends may not always be indicative of future outcomes, especially in rapidly changing industries or economic environments.

2. Limited Comparability:

Ratios may not be directly comparable across companies or industries due to differences in accounting methods, business models, and industry norms. This makes it challenging to benchmark performance accurately.

3. Inaccurate Financial Statements:

Ratio analysis is only as reliable as the financial statements on which it is based. Inaccurate or manipulated financial statements can distort ratio calculations and lead to misleading conclusions.

4. Lack of Context:

Ratios provide numerical values without context, making it difficult to interpret their significance without considering the company's specific circumstances, industry dynamics, and external factors.

5. Vulnerability to Manipulation:

Ratios can be manipulated by management to present a favorable image of the company's financial performance. Creative accounting techniques or selective disclosure of information can distort ratio calculations and mislead stakeholders.

6. Inflationary Effects:

Ratios may be affected by inflation, especially when historical cost accounting is used. Inflationary effects can distort the valuation of assets and liabilities, leading to misleading ratio analysis results.

7. Single Metric Focus:

Ratio analysis focuses on individual metrics, which may not provide a holistic view of a company's financial health. A single ratio may not capture the complexity and interdependence of various financial variables.

8. Limited Predictive Value:

Ratios are backward-looking indicators that may not accurately predict future performance or financial distress. External factors such as changes in market conditions, regulations, or technological advancements can significantly impact future outcomes.

CLASSIFICATION OF RATIO:

1. Liquidity Ratios:

These ratios measure a company's ability to meet its short-term obligations with its short-term assets.

Examples: Current ratio, Quick ratio (acid-test ratio).

2. Profitability Ratios:

These ratios assess a company's ability to generate profits relative to its revenue, assets, and equity.

Examples: Gross profit margin, Net profit margin, Return on assets (ROA), Return on equity (ROE)

3. Solvency Ratios:

These ratios evaluate a company's long-term financial viability and ability to meet long-term obligations.

Examples: Debt-to-equity ratio, Interest coverage ratio.

4. Efficiency Ratios:

These ratios measure how effectively a company utilizes its assets and liabilities to generate revenue.

Examples: Inventory turnover ratio, Accounts receivable turnover ratio, Asset turnover ratio.

5. Market Value Ratios:

These ratios assess a company's valuation relative to its market price and financial performance.

Examples: Price-to-earnings (P/E) ratio, Price-to-book (P/B) ratio, Market-to-book ratio.

6. Coverage Ratios:

These ratios indicate a company's ability to cover certain expenses or obligations.

Example: Times interest earned ratio.

7. Activity Ratios:

These ratios measure the efficiency of various operational activities within the company.

Examples: Inventory turnover ratio, Accounts payable turnover ratio.

8. Turnover Ratios:

These ratios measure the speed at which certain assets are converted into sales or cash.

Examples: Inventory turnover ratio, Accounts receivable turnover ratio, Fixed asset turnover ratio.

9. Capital Structure Ratios:

These ratios provide insights into the mix of debt and equity financing used by the company.

Examples: Debt-to-equity ratio, Equity ratio, Debt ratio.

10. Growth Ratios:

These ratios assess the company's growth rates over time.

Examples: Sales growth rate, Earnings growth rate, Dividend growth rate.

Liquidity Ratios

Liquidity ratios are financial ratios that measure a company's ability to repay both short- and long-term obligations. Common liquidity ratios include the following:

The current ratio measures a company's ability to pay off short-term liabilities with current assets:

Current Ratio = Current Assets / Current Liabilities

The acid-test ratio measures a company's ability to pay off short-term liabilities with quick assets:

Acid-Test Ratio = Current Assets – Inventories / Current Liabilities

The cash ratio measures a company’s ability to pay off short-term liabilities with cash and cash equivalents:

Cash Ratio = Cash and Cash Equivalents / Current Liabilities

The operating cash flow ratio is a measure of the number of times a company can pay off current liabilities with the cash generated in a given period:

Operating Cash Flow Ratio = Operating Cash Flow / Current Liabilities

Profitability Ratios

Profitability ratios measure a company’s ability to generate income relative to revenue, balance sheet assets, operating costs, and equity. Common profitability financial ratios include the following:

The gross margin ratio compares the gross profit of a company to its net sales to show how much profit a company makes after paying its cost of goods sold:

Gross Margin Ratio = Gross Profit / Net Sales

The operating margin ratio, sometimes known as the return on sales ratio, compares the operating income of a company to its net sales to determine operating efficiency:

Operating Margin Ratio = Operating Income / Net sales

The return on assets ratio measures how efficiently a company is using its assets to generate profit:

Return on Assets Ratio = Net Income / Total Assets

The return on equity ratio measures how efficiently a company is using its equity to generate profit:

Return on Equity Ratio = Net Income / Shareholder’s Equity

Turnover Ratio:

Sure, turnover ratios measure how efficiently a company utilizes its assets or liabilities to generate revenue. Here's a brief explanation of turnover ratio along with its formula:

Turnover Ratio:

Turnover ratio indicates the speed at which certain assets or liabilities are converted into sales or cash. It's typically expressed as a ratio or a number of times.

Formula:

Turnover Ratio = Total Sales or Transactions/Average Balance of the Asset or Liability

This formula can be adapted to various turnover ratios depending on what asset or liability you're focusing on. For example:

Inventory Turnover Ratio:

Turnover Ratio = Cost of Goods Sold (COGS) /Average Inventory

Accounts Receivable Turnover Ratio:

Accounts Receivable Turnover Ratio = Total Credit Sales / Average Accounts Receivable

Accounts Payable Turnover Ratio:

Accounts Payable Turnover Ratio Total Purchase / Average Accounts Payable

In each case, the numerator represents the total sales, purchases, or transactions related to the asset or liability, while the denominator represents the average balance of the asset or liability over a specified period.

Type 1: **Final Account to Ratio**

Problem 1. From the data calculate:

(i) Gross Profit Ratio (ii) Net Profit Ratio (iii) Return on Total Assets

(iv) Inventory Turnover (v) Working Capital Turnover (vi) Net worth to Debt

Sales	25,20,000	Other Current Assets	7,60,000
Cost of sale	19,20,000	Fixed Assets	14, 40,000
Net profit	3,60,000	Net worth	15,00,000
Inventory	8,00,000	Debt.	9,00,000
Current Liabilities	6,00,000		

Solution:

1. Gross Profit Ratio = (GP/ Sales) * 100 = 6

Sales – Cost of Sales Gross Profit

25,20,000 – 19,20,000 = 6,00,000

2. Net Profit Ratio = (NP / Sales)* 100 = 3

3. Inventory Turnover Ratio = Turnover / Total Assets) * 100= 1920000/800000= 2.4 times

Turnover Refers Cost of Sales

4. Return on Total Assets = NP/ Total Assets = (360000/3000000)*100 = 12%

FA+ CA +inventory [14,40,000 + 7,60,000 + 8,00,000] = 30,00,000

5. Net worth to Debt = Net worth/ Debt= (1500000/900000)* 100 = 1.66 times

6. Working Capital Turnover = Turnover/Working capital

Working Capital = Current Assets – Current Liabilities

= 8,00,000 + 7,60,000 – 6,00,000

15,60,000 – 6,00,000= 9,60,000

Working Capital Turnover Ratio = 19,20,000 = 2 times.

Problem 2. Perfect Ltd. gives the following Balance sheet. You are required to compute the following ratios.

(a) Liquid Ratio

(b) Solvency Ratio

(c) Debt-Equity Ratio

(d) Stock of Working Capital Ratio

Balance Sheet	Rs.		Rs.
Equity share capital	1500000	Fixed Assets	1400000
Reserve fund	100000	Stock	500000
6% Debentures	300000	Debtors	200000
Overdraft	100000	Cash	100000
Creditors	200000		2200000

Solution:

(a)Liquid Ratio= Liquid Assets / Liquid Liabilities (or)

Liquid Assets / Current Liabilities

LA Debtors = 2,00,000 i.e., 3,00,000 / 200000 = 1.5

Cash = 1,00,000

= 3,00,000

Liquid Liabilities: Creditors = 2,00,000

(b) Debt – Equity Ratio = External Equities / Internal Equities

External Equities:

All outsiders loan including current liabilities

3,00,000 + 1,00,000 + 2,00,000 = 6,00,000

Internal Equities:

It Includes shareholders fund + Reserves

15,00,000 + 1,00,000 = 16,00,000

Debt – Equity Ratio = 600000/ 1600000 = 0 · 375

© Solvency Ratio = Outside Liabilities / Total Assets

Outside Liabilities = Debenture + Overdraft + Creditors

= 3,00,000 + 1,00,000 + 2,00,000 = 6,00,000

Solvency Ratio =(600000 / 2200000) * 100

= 27.27%

(d)Stock of Working Capital Ratio = Stock / Working Capital

Working Capital = Current Assets – Current Liabilities

= 8,00,000 – 3,00,000 = 5,00,000

Stock of Working Capital Ratio =* 100 = 100%

Problem 3. Calculate the following ratios from the balance sheet given below:

(i) Debt – Equity Ratio (ii) Liquidity Ratio

(iii) Fixed Assets to Current Assets (iv) Fixed Assets Turnover

Balance Sheet

Liabilities	Rs.	Assets	Rs.
Equity shares of Rs. 10 each	1,00,000	Goodwill	60000
Reserves	20,000	Fixed Assets	140000
P.L. A/c	30,000	Stock	30000
Secured loan	80,000	Sundry Debtors	30000
Sundry creditors	50,000	Advances	10000
Provision for taxation	20,000	Cash Balance	10000
	3,00,000		300000

The sales for the year were Rs. 5,60,000.

Solution:

Debt – Equity = Long – Term Debt / Shareholders Fund

Ratio = Secured loan Rs. 80,000

Shareholder's Fund= Equity Share Capital + Reserves + P.L.A/c

= 1,00,000 + 20,000 + 30,000 = 1,50,000

Debt-Equity Ratio = 80,000 / 1,50,000=.53

Liquidity Ratio = Liquid Assets / Liquid Liabilities

Liquid Assets = Sundry Debtors + Advances + Cash Balance

30,000 + 10,000 + 30,000 = 70,000

Liquid Liabilities = Provision for Taxation + sundry creditors

= 20,000 + 50,000 = 70,000

Liquid Ratio = 70,000 / 70,000= 1

Fixed Assets to Current Assets

= Fixed Assets / Current Assets= 1,40,000/ 100000 = 1.4

Fixed Assets Turnover =Turnover / Fixed Assets= 5,60,000/1,40,000 = 4

Problem 4. The Balance sheet of Naronath & Co. as on 31.12.2000 shows as follows:

Liabilities	Rs.	Assets	Rs.
Equity capital	1,00,000	Fixed Assets	1,80,000
15% Preference shares	50,000	Stores	25,000
12% Debentures	50,000	Debtors	55,000
Retained Earnings	20,000	Bills Receivable	3,000
Creditors	45,000	Bank	2,000

2,65,000 2,65,000

Comment on the financial position of the Company i. e., Debt – Equity Ratio, Fixed Assets Ratio, Current Ratio, and Liquidity.

Solution:

Debt – Equity Ratio = Debt – Equity Ratio / Long – Term Debt

Long-term Debt = Debentures

= 50,000

Shareholder's Fund = Equity + Preference + Retained Earnings

= 1,00,000 + 50,000 + 20,000

= 50,000

= 1,70,000

= ·29

Fixed Assets Ratio= Fixed Assets / Proprietor's Fund= -1,80,000

Proprietor's Fund=Equity Share Capital + Preference Share Capital+ Retained Earnings

=1,00,000 + 50,000 + 20,000 = 1,70,000

Fixed Assets Ratio = 1,80,000 / 1,70,000= 1.05

Current Ratio = Current Assets / Current Liabilities

Current Assets = Stores + Debtors + BR + Bank= 25,000 + 55,000 + 3,000 + 2,000 = 85,000

Liquid Ratio=45,000 / 85,000= 1.88

Liquid Assets = 45,000

Liquid Liabilities = Debtors + Bill Receivable + Cash=55,000 + 3,000 + 2,000 = 60,000

Liquid Ratio = 60,000 / 45,000 = 1.33

Problem 5: From the following particulars pertaining to Assets and Liabilities of a company calculate:

(a) Current Ratio (b) Liquidity Ratio (c) Proprietary Ratio

(d) Debt-equity Ratio (e) Capital Gearing Ratio

Liabilities	Rs.	Assets	Rs.
5000 equity shares Rs. 10 each	500000	Land & Building	500000
8% 2000 pre shares Rs. 100 Each	200000	Plant & Machinery	600000
9% 4000 Debentures of Rs. 100 each	400000	Debtors	200000
Reserves	300000	Stock	240000
Creditors	150000	Cash and Bank	55000
Bank overdraft	50000	Prepaid expenses	5000
	1600000		1600000

Solution:

Current Ratio = Current Assets / Current Liabilities

Current Assets = Stock + Cash + Prepaid Expenses + Debtors

= 2,40,000 + 55,000 + 5,000 + 2,00,000 = 5,00,000

Current Liabilities = Creditors + Bank Overdraft

=1,50,000 + 50,000 = 2,00,000

=5,00,000 / 2,00,000

= 2.5 : 1

Liquid Ratio = Liquid Assets / Liquid Liabilities

Liquid Assets = Cash and Bank + Debtors

=55,000 + 2,00,000 = 2,55,000

Liquid Liabilities: Creditors = 1,50,000

Liquid Ratio = 2,55,000 / 1,50,000

= 1.7 : 1

Proprietor's Ratio = Proprietor's Fund / Total Tangible Assets

Proprietor's Fund = Equity Share Capital + Preference

Share Capital + Reserves and Surplus

=5,00,000 + 2,00,000 + 3,00,000

Proprietary Ratio=10,00,000 / 16,00,000

= 0.625 : 1

Debt – Equity Ratio = External Equities / Internal Equities

External Equities = Long-term Liabilities + Short-term Liabilities

= 4,00,000 + 2,00,000 = 6,00,000

Internal Equities = Proprietor's funds

= 6,00,000 / 10,00,000

= 0.6 : 1

Capital Gearing Ratio = Fixed Interest Bearing Securities / Equity Share Capital + Reserves

Fixed Interest Bearing Securities =	Preference Shares	2,00,000
	Debentures	4,00,000
		6,00,000

= 6,00,000 / 8,00,000

= 0.75 : 1

Problem 6. From the following details of a trader you are required to calculate:
(i) Purchase for the year.
(ii) Rate of stock turnover
(iii) Percentage of Gross profit to turnover

Sales	33,984	Stock at the close at cost price	1814
Sales Returns	380	G.P. for the year	8068
Stock at the beginning at cost price	1378		

Solution:
Trading Account

To Opening stock	1378	By Sales	33984

To Purchase (BD		25972	Sales Return	380
To gross profit		8068		33604
By closing Stock	1814			
	35418		35418	

(i) Purchase for the year 25,972

(ii) Stock Turnover = Cost of Goods Sold

Cost of Goods Sold = Cost of Goods Sold / Average Stock

Average Stock = (Opening Stock + Closing Stock)/ 2

= (1372 + 1814)/2

= 25916/1596

=16.23 times

(iii) Percentage of Gross Profit to Turnover = Gross Profit / Sales *100

= 8068 / 33 ,984 * 100

= 23.74%.

Problem 7. Calculate stock turnover ratio from the following information:

Opening stock 5	8,000
Purchases	4,84,000
Sales	6,40,000

Gross Profit Rate – 25% on Sales.

Solution:

Stock Turnover Ratio = Cost of Goods Sold / Average Stock

Cost of Goods Sold = Sales- G.P

= 6,40,000 – 1,60,000 = 4,80,000

Stock Turnover Ratio= 4,80,000 /58000

= 8.27 times

Here, there is no closing stock. So there is no need to calculate the average stock.

Problem 8. Calculate the operating Ratio from the following figures.

Items	(Rs. in Lakhs)
Sales	17874
Sales Returns	4
Other Incomes	53
Cost of Sales	15440
Administration and Selling Exp.	1843
Depreciation	63
Interest Expenses (Non- operating	456

Solution:

Operating Ratio = (Cost of Goods Sold + Operating Expenses * 100) / Sales

= ((15,440 + 1,843)/ 17,870)*100

= 97%

Problem 9. The following is the Trading and Profit and loss account of Mathan Bros Private Limited for the year ended June 30,2001.

		Rs.			Rs.
To Stock in hand		76250	By Sales		500000
To Purchases		315250	By Stock in hand		98500
To Carriage and Freight		2000			
To Wages		5000			
To Gross Profit		200000			
		598500			598500
To Administration					
Expenses		1,01,000	By Gross profit		2,00,000
To Finance Expenses. :			By Non-operating Incomes		
Interest		1200	Interest on Securities	1,500	
Discount	2400		Dividend on Shares	3, 750	
Bad Debts	3400	7000	Profit on Sale of Shares	750	6,000

To Selling Distribution Expenses		12000	
To Non-operating expenses			
Loss on sale of securities	350		
Provision for legal suit	1,650	2000	
To Net profit		84000	
		206000	206000

You are required to calculate:

(i) Gross profit Ratio (ii) Expenses Ratio (individual)

(iii) Net profit Ratio (iv) Operating profit Ratio

(v) Operating Ratio (vi) Stock turnover Ratio

Gross Profit Ratio =Gross Profit/ Sales * 100 = 2,00,000 / 500000 * 100

Expenses Ratio =Individual Expenses / Sales

Administration Expenses / Sales *100 =101000/500000 *100= 2.02%

Finance Expenses/ Sales *100 = 7000/ 500000 * 100=1.04 %

Selling and Distribution Expenses / Sales* 100= 12 000/ 500000 *100= 2.40%

Non- Operating Expenses / Sales * 100 = 2000/ 500000 * 100= 0.4%

Net Profit Ratio:

Net Profit/ Sales *100 = 84000/ 500000 *100= 16.8%

Operating Profit Ratio =Operating Profit / Sales *100

Operating Profit = Net Profit + Non-Operating Expenses – Non Operating Incomes

= 84,000 + 2,000 – 6,000 = 80,000

= 80•000 / 5000000* 100 = 16%

Operating Ratio = (Cost of Goods Sold + Operating Expenses)/Sales* 100

Cost of Goods Sold = Sales – Gross profit

5,00,000 – 2,00,000= 3,00,000

Operating Expenses

All Expenses Debited in the Profit & Loss A/c Except Non-Operating Expenses

[including Finance expense]

1,01,000 + 7,000 + 12,000 = 1,20,000

Operating Ratio = (3,00,000 + 1,20,0000) 500000 * 84%

Stock Turnover Ratio = Cost of Goods Sold / Average Stock

Costs of Goods Sold = 3,00,000

Average Stock = (Opening Stock + Closing Stock)/2

= (76,250 + 95,500) / 2

= 85,875

Cash Flow Statement:

A cash flow statement is a financial statement that provides information about the cash inflows and outflows of a company during a specific period. It helps stakeholders understand how a company generates and uses cash to support its operations, investments, and financing activities.

There are three main sections in a cash flow statement:

1. Operating Activities:

This section reports cash flows from the company's primary business activities, such as sales of goods and services, payments to suppliers, salaries to employees, and taxes paid. It shows whether the company is generating or using cash from its core operations.

2. Investing Activities:

This section reports cash flows from the buying and selling of long-term assets, such as property, plant, and equipment, as well as investments in securities such as stocks and bonds. It shows how the company is investing its cash for future growth and returns.

3. Financing Activities:

This section reports cash flows related to the company's financing activities, such as issuing or repurchasing stock, issuing or repaying debt, and paying dividends to shareholders. It shows how the company raises and repays capital to support its operations and growth.

Problem-1

Balance Sheet for the year 2017-18 and 2018-19

Liabilities	2017	2018	Assets	2017	2018
Share capital	200000	250000	Cash	30000	47000
Creditors	70000	45000	Debtors	120000	115000
Profit and Loss A/C	10000	23000	Stock	80000	90000
			Land	50000	66000
	280000	318000		280000	318000

Solution:

Adjusted Profit and Loss Account

Dr	Amt	Cr	Amt
To Balance c/d	23000	By Balance b/d	10000
		By **Cash from Operations** (Bal fig)	13000
	23000		23000

Cash Flow Statement

Cash Inflows	Amt	Cash Outflows	Amt
Opening Balance in Cash	30000	Purchase of Land	16000
Decrease in Debtors	5000	Increase in Stock	10000
Issue of Share Capital	50000	Decrease in Creditors	25000
Cash from Operations	13000		
		Closing Balance in Cash	47000
	98000		98000

Funds Flow Statement:

A Fund Flow Statement (also known as a Funds Flow Statement) is a financial statement that provides information about changes in a company's financial position over a specific period.

Unlike the cash flow statement, which focuses on cash inflows and outflows, the fund flow statement focuses on changes in various types of funds or financial resources.

The Fund Flow Statement typically consists of two main sections:

1. Source and Uses of Funds:

This section analyzes the changes in different sources and uses of funds during the period. Sources of funds include cash generated from operations, proceeds from borrowings or equity issuances, and any other inflows of funds. Uses of funds include investments in assets, repayment of debt, payment of dividends, and any other outflows of funds.

2. Net Increase or Decrease in Funds:

This section summarizes the net increase or decrease in funds during the period. It calculates the difference between total sources and total uses of funds to determine whether there was a net inflow or outflow of funds.

Basis for Comparison	Cash Flow Statement	Fund Flow Statement
Meaning	Cash Flow Statement is the summarized statement of cash receipts and cash payments of the firm between two financial periods.	Fund Flow Statement is a financial tool, designed to analyse the changes in financial position of the firm, comparing two financial years.
Basis of Accounting	Cash Basis of Accounting	Accrual Basis of Accounting
Discloses	Inflows and Outflows of Cash	Sources and applications of funds
Tool for	Short term financial analysis	Long term financial analysis
Objective	To explain the cash movement amidst two points of time.	To explain the causes of changes in the balance sheet items, i.e. asset and liabilities between two financial year.
Opening Balance	Opening balance is present	No opening balance
Difference in sides	Indicates the closing balance of cash	Indicates the increase or decrease in working capital
Part of Financial Statement	Yes	No

Problem-1

Prepare a fund flow statement from the following information: (Rs.)

- Increase in working capital: 4,000
- Net profit of 10,750 before written-off goodwill
- Depreciation on fixed assets: 1,750
- Dividend paid: 3,500
- Goodwill written-off: 5,000 out of profits
- 5,000 in share capital was issued for cash
- Machinery purchased for 10,000

Solution:

An overview of the funds from operations is shown as follows:

Net profit before writing off goodwill	10,750
Add: Depreciation	1,750
	12,500

In turn, the fund flow statement can be prepared as follows:

Sources of Funds	**Rs.**	**Application of Funds**	**Rs.**
Income from operations	12,500	Payment of dividend	3,500
Issue of share capital	5,000	Purchase of machinery	10,000
		Increase in working capital	4,000
	17,500		17,500

Problem-2

Prepare a fund flow statement from the balance sheet of John Trading Co. for the year 2024-25.

John Trading Co. Balance Sheet For the year 2024-25

	2024	**2025**		**2024**	**2025**
	Rs.	Rs.		Rs.	Rs.
Share capital	500,000	650,000	Goodwill	20,000	15,000
Share premium	50,000	-	Investments	150,000	200,000
P & L A/c	-	25,000	Fixed Assets	550,000	550,000
Debentures	200,000	-	Debtors	60,000	40,000
Bank overdraft	80,000	100,000	Stock	120,000	80,000
Creditors	60,000	75,000	Cash	12,000	5,000
Proposed dividend	10,000	15,000	Prepaid	-	-
Provision of tax	20,000	25,000	Expenses	8,000	-
	920,000	**890,000**		**920,000**	**890,000**

The following information is also given:

- Adjustments: Net profit before tax and dividend is Rs.63,000, provision of tax during the year is Rs.23,000, actual tax paid is Rs.18,000, and provision of dividends is Rs.15,000
- Depreciation charged: Rs.80,000
- Bonus shares of Rs.50,000 out of share premium

Solution

Income from Operations (Rs)

Net profit		63,000
Less: Income tax dividend provision	23,000 + 15,000	38,000
Add: Depreciation (Fixed Assets)	80,000	25,000
Goodwill written off 5,000	5,000	85,000
Proposed tax 23,000 + Proposed dws 15,000		38,000
		148000

Change in Working Capital (Rs.)

Current assets (Dr.)	**Rs. Increase**	**Rs. Decrease**
Drs.		20,000
Stock		40,000
Cash		7,000
Prepaid expenses		8,000
Current liabilities		
Bank overdraft		20,000
Crs.		15,000
Decrease in working capital		**110,000**

Proposed Dividend

	Rs.		**Rs.**
To bank	10,000	By balance b/d	10,000
To c/d	15,000	By P & L	15,000
	25,000		**25,000**

Proposed Income Tax

	Rs.		**Rs.**
To balance c/d	25,000	By balance b/d	20,000
To bank	18,000	By P & L	23,000
			43,000

Fixed Assets

	Rs.		**Rs.**
To b/d	550,000	By depreciation	80,000
To bank	80,000	By balance c/d	550,000
	630,000		**630,000**

Fund Flow Statement

Sources of Funds	Rs.	Application of Funds	Rs.
Share capital (50,000 bonus shares out of premium)	100,000	Deb. redemption	200,000
Income from operations	148,000	Tax paid	18,000
Decrease in working capital	110,000	Dividend paid	10,000
		Investment purchased	50,000
		Fixed assets purchased	80,000
	358,000		358,000

Unit –IV

Budget and Budgetary Control

Meaning:

Budgeting is the process of creating a plan that outlines an organization's financial goals and objectives for a specific period, typically a fiscal year. It involves estimating revenues, expenses, and other financial resources needed to achieve those goals. Budgets can be prepared for various aspects of an organization's operations, including sales, production, marketing, research and development, and capital expenditures.

Budgetary control, on the other hand, refers to the process of monitoring and controlling actual financial performance against the budgeted figures. It involves comparing actual results with budgeted amounts, identifying variances, and taking corrective actions as needed to ensure that financial goals are met. Budgetary control helps management track performance, allocate resources effectively, and make informed decisions to achieve organizational objectives.

G.A.Welshstates, "A budget is a written plan covering projected activities of a firm for a definite time period." Budgetary Control: Budgetary Control is a method of managing costs through preparation of budgets. Budgeting is thus only a part of the budgetary control.

Objectives of Budgetary Control:

1. Planning:

Budgetary control helps in the planning process by setting financial goals and objectives for the organization. It provides a framework for allocating resources efficiently and effectively to achieve these goals.

2. Coordination:

Budgetary control facilitates coordination among different departments and functions within the organization. It ensures that everyone is working towards common financial objectives and encourages cooperation and collaboration.

3. Performance Evaluation:

Budgetary control enables management to evaluate actual financial performance against budgeted targets. It helps identify areas of strength and weakness, allowing management to take corrective actions as needed.

4. Cost Control:

Budgetary control helps in controlling costs by setting spending limits and monitoring expenses. It helps prevent overspending and ensures that resources are used optimally.

5. Decision Making:

Budgetary control provides management with timely and accurate financial information, enabling them to make informed decisions about resource allocation, investment opportunities, and strategic initiatives.

6. Motivation:

Budgetary control can serve as a motivational tool by setting clear targets and objectives for employees. It provides a basis for performance evaluation and rewards, encouraging employees to work towards achieving organizational goals.

7. Communication:

Budgetary control promotes communication and transparency within the organization by clearly communicating financial goals, expectations, and performance targets to all stakeholders.

8. Forecasting:

Budgetary control helps in forecasting future financial performance based on past trends and current market conditions. It provides insights into potential risks and opportunities, enabling management to plan for the future effectively.

Merits of Budgetary Control:

1. Goal Setting and Planning:

Budgetary control helps in setting clear financial goals and objectives for the organization. It facilitates the planning process by providing a structured framework for resource allocation and utilization.

2. Performance Evaluation:

Budgetary control enables management to evaluate actual financial performance against budgeted targets. It helps identify variances, analyze the reasons behind them, and take corrective actions as necessary.

3. Cost Control:

Budgetary control helps in controlling costs by setting spending limits and monitoring expenses. It encourages efficiency in resource utilization and prevents unnecessary expenditures.

4. Decision Making:

Budgetary control provides management with timely and relevant financial information, aiding in informed decision-making. It helps prioritize projects, allocate resources effectively, and identify areas for investment or cost-cutting

5. Motivation:

Budgetary control can serve as a motivational tool by setting clear targets and objectives for employees. It provides a basis for performance evaluation and rewards, encouraging employees to work towards achieving organizational goals.

6. Coordination:

Budgetary control fosters coordination among different departments and functions within the organization. It ensures that everyone is working towards common financial objectives and encourages collaboration.

Demerits of Budgetary Control:

1. Time Consuming:

Budgetary control requires significant time and effort to prepare, implement, and monitor budgets. It may divert management's attention from other important tasks and initiatives.

2. Rigidity:

Budgets are often based on assumptions and forecasts that may not accurately reflect changing market conditions or unforeseen events. This rigidity can make it challenging to adapt to unexpected changes or opportunities.

3. Conflict:

Budgetary control may lead to conflicts within the organization, especially if there are disagreements over budget allocations or performance targets. This can create tension among employees and hinder collaboration.

4. Risk of Manipulation:

Budgets can be manipulated by management to meet targets or inflate performance metrics. Creative accounting techniques or unrealistic budget assumptions may distort financial reports and undermine the effectiveness of budgetary control.

5. Focus on Short-Term Results:

Budgetary control may encourage a short-term focus on meeting budget targets at the expense of long-term strategic goals. This can hinder innovation, investment in research and development, and other initiatives that may not yield immediate financial returns.

6. Inflexibility:

Once budgets are set, they may be difficult to adjust in response to changing circumstances or new information. This inflexibility can limit the organization's ability to adapt to evolving market conditions or seize emerging opportunities.

Sales Production of Budgetary Control:

Budgetary control in sales production refers to the process of setting and managing budgets for sales-related activities within an organization to ensure that actual sales performance aligns with planned targets

Steps involved in Sales Production of Budgetary Control

1. Setting Sales Budgets:

This involves determining the sales targets for a specific period, typically based on historical data, market trends, and organizational goals. The budget may be set for different products, regions, sales teams, or other relevant segments.

2. Allocating Resources:

Once the sales budget is established, resources such as manpower, marketing funds, and production capacity are allocated accordingly to support the sales targets.

3. Monitoring Performance:

Throughout the budget period, actual sales performance is tracked and compared to the budgeted figures. This involves collecting data on sales volumes, revenues, profit margins, market share, and other relevant metrics.

4. Identifying Variances:

Any discrepancies between actual performance and budgeted targets are identified and analyzed. Variances can be favorable (actual performance exceeds budget) or unfavorable (actual performance falls short of budget).

5. Taking Corrective Action:

Based on the analysis of variances, management takes corrective actions to address any deviations from the budget. This may involve adjusting sales strategies, reallocating resources, revising targets, or implementing cost-saving measures.

6. Continuous Improvement:

Budgetary control in sales production is an ongoing process aimed at continuous improvement. Lessons learned from previous budget periods are used to refine future budgets and enhance sales performance.

Flexibility Budget:

A flexibility budget, also known as a flexible budget, is a financial plan that adjusts based on changes in activity levels or other relevant factors. Unlike traditional static budgets that remain fixed regardless of variations in activity, a flexibility budget is designed to be adaptable and responsive to fluctuations in business conditions.

Characteristics of Flexibility Budgets:

1. Activity-Based Adjustment:

Flexibility budgets are constructed to reflect how costs and revenues vary with changes in activity levels. This means that as activity increases or decreases, the budgeted amounts for expenses and revenues are adjusted accordingly

2. Realistic Performance Assessment:

By comparing actual results against the flexibility budget at different levels of activity, managers can more accurately evaluate performance. This enables them to identify areas of efficiency or inefficiency and make informed decisions for improvement.

3. Scenario Planning:

Flexibility budgets facilitate scenario analysis by allowing managers to forecast financial outcomes under various activity scenarios. This helps in assessing the potential impact of different business strategies or market conditions on the organization's financial performance.

4. Dynamic Resource Allocation:

Since flexibility budgets provide insights into how costs and revenues change with activity levels, they support more effective resource allocation decisions. Managers can allocate resources in a manner that maximizes efficiency and profitability based on anticipated levels of activity.

5. Continuous Improvement:

Flexibility budgets promote a culture of continuous improvement by enabling organizations to adapt to changing circumstances. Lessons learned from comparing actual results with flexibility budgets can inform future budgeting processes and operational strategies.

Fixed Budget vs Flexible Budget

- Flexible budgets reflect the levels of business activity and output to be produced in line with the changes in the business environment, whereas flexible budgets are prepared on the assumption that the future of the business will not be much different from its past.
- Flexible budgets allow the managers of the firm to be proactive to the changes that are being forecasted, which gives the firm a definite benefit in being able to protect itself through careful planning and preparation.
- On the other hand, fixed budgets do not account for such changes and are too rigid to deal with the sudden changes in activity levels, which may adversely affect the firm.
- Fixed budgets are less complicated to prepare in contrast to flexible budgets, which are much more complex, since they keep changing. However, in today’s ever changing environment the use of a flexible budget seems to be a safer bet than the use of a fixed budget since the future is quite unpredictable given the recent global economic conditions.

Problem-1

Using the following information, prepare a flexible budget for the production of 80% and 100% activity.

Production at 50% Capacity	5,000 Units
Raw Materials	Rs.80 per unit
Direct Labor	Rs.50 per unit
Direct Expenses	Rs.15 per unit
Factory Expenses	Rs.50,000 (50) (Fixed)
Administration Expenses	Rs.60,000 (Variable)

Solution

Flexible Budget at a Capacity of			
Capacity of Output Units	**50% 5,000**	**80% 8,000**	**100% 10,000**
	Rs.	**Rs.**	**Rs.**
Raw Materials	4,00,000	6,40,000	8,00,000
Labor	2,50,000	40,000	50,000
Direct Expenses	75,000	1,20,000	1,50,000
Prime Cost	7,25,000	11,60,000	14,50,000
Factory Expenses 50% Fixed (50,000)	25,000	40,000	50,000
Factory Cost	7,75,000	12,25,000	15,25,000
Admin Expenses 40% Fixed (60,000)	24,000	24,000	24,000
Variable 60%	36,000	57,600	72,000
Total Cost	**8,35,000**	**13,06,000**	**16,21,000**

Problem-2

The expenses budgeted for production of 10000 units in a factory are furnished below:

	Per Unit Rs.
Materials 70	
Labour 25	
Variable factory overheads	20
Fixed Factory Overheads (Rs100000)	20
Variable Expenses (Direct)	5
Selling Expenses (10% fixed)	13
Distribution Expenses (20% fixed)	7
Administrative Expenses (Fixed-Rs.50000)	5
Total Cost of Sales per unit	155

You are required to prepare a budget for the production of 6000 units and 8000 units.

Flexible Budget

Particulars	Output 6000 Units		Output 8000 Units	
	Per Unit Rs.	**Amount Rs.**	**Per Unit Rs.**	**Amount Rs.**
Variable or Production Expenses:				
Material	70	420000	70	560000
Labour	25	150000	25	200000
Direct Variable Expenses	5	30000	5	40000
Prime Cost	100	600000	100	800000
Factory Overheads:				
Variable Overheads	20	120000	20	160000
Fixed Overheads	16.67	100000	12.50	100000
Works Cost	136.67	820000	132.50	1060000
Administrative Expenses Fixed	8.33	50000	6.25	50000
Cost of Production	145	870000	138.75	1110000
Selling Expenses:				
Fixed 10% off Rs.13	2.17	13000	1.63	13000
Variable 90% off Rs.13	11.70	70200	11.70	93600
Distribution Expenses:				
Fixed 20% off Rs.7	2.33	14000	1.75	14000
Variable 80% off Rs.7	5.60	33600	5.60	44800
Total Cost of Sales	166.80	1000800	159.43	1275400

Cash Budget:

A cash budget is a financial tool used by businesses and individuals to forecast and manage cash inflows and outflows over a specific period, typically on a monthly or quarterly basis. It helps in planning for the organization's short-term liquidity needs and ensuring that there is enough cash available to meet financial obligations as they come due.

Benefits of Cash Budgets:

1. Liquidity Management:

Cash budgets help organizations manage their liquidity by providing visibility into future cash flows. This enables them to plan and allocate resources effectively to ensure that there is enough cash on hand to meet financial obligations.

2. Financial Planning:

Cash budgets are an essential component of overall financial planning. They help organizations set realistic financial goals, assess funding needs, and evaluate the timing of expenditures.

3. Decision Making:

By forecasting future cash flows, cash budgets support informed decision-making regarding investments, financing options, and operational strategies. They help management identify potential cash shortages or surpluses and take proactive measures to address them.

4. Performance Evaluation:

Cash budgets allow organizations to compare actual cash flows with budgeted amounts, facilitating performance evaluation and identifying areas for improvement in cash management practices.

Problem

Prepare a Cash Budget for the three months ending 30th June 2011nfrom the information given below: a)

Month	**Sales Rs.**	**Materials Rs.**	**Wages Rs.**	**Overheads Rs.**
February	14000	9600	3000	1700
March	15000	9000	3000	1900
April	16000	9200	3200	2000
May	17000	10000	3600	2200
June	18000	10400	4000	2300

b) Credit Terms are:

Sales Debtors 10% sales are on cash, 50% of the credit sales are collected next month and the balance in the following month:

Creditors: Materials 2 Months

Wages ¼ month

Overheads ½ month

c) Cash and Bank Balance on 1st April, 2011 is expected to be Rs.6000

d) Other relevant information's are:

i) Plant and Machinery will be installed in February, 2011 at a cost of Rs.96000. the monthly instalment of Rs.2000 is payable from April onward.

ii) Dividend @5% on Preference Share Capital of Rs.200000 will be paid on 1st June.

iii) Advance to be received for Sale of Vehicles Rs.9000 in June.

iv) Dividends from investments amounting to Rs.1000 are expected to be received in June.

v) Income Tax (advance) to be paid in June is Rs.2000.

Solution:

Cash Budget (April/June 2011)

Particulars	**April**	**May**	**June**	**Total**
Balance	6000	3950	3000	12950
Receipts:				
Sales/Debtors	14650	15650	16650	46950
Dividend	-	-	1000	1000
Advance against Sale of Vehicle	-	-	9000	9000
Total Receipts	14650	15650	26650	56950
Payments:				
Creditors for Materials (after 2 months)	9600	9000	9200	27800
Wages (2)	3150	3500	3900	10550
Overheads (3)	1950	2100	2250	6300
Capital Expenditure	2000	2000	2000	6000
Dividend on Pref. Share:				
5% of Rs.200000	-	-	10000	10000
Income Tax Advance	-	-	2000	2000
Total Payments (3)	16700	16600	29350	62650
Surplus/(Deficit)(2-3)	(2050)	(950)	(2700)	(5700)
Balance (1-4)	3950	3000	300	7250

Unit -V

Marginal Costing:

Marginal costing, also known as variable costing, is a costing technique used in managerial accounting to analyze the impact of changes in production volume on costs and profitability. It focuses on segregating costs into fixed and variable components to facilitate decision-making, particularly in pricing, product mix, and production volume decisions.

The marginal cost is the cost of producing one more unit of a good. Marginal cost includes all of the costs that vary with the level of production.

For example, if a company needs to build a new factory in order to produce more goods, the cost of building the factory is a marginal cost.

Concepts of Marginal Costing:

1. Variable Costs:

In marginal costing, only variable costs are considered as product costs. Variable costs are those costs that vary directly with the level of production or sales, such as direct materials, direct labor, and variable overhead. These costs are incurred only when production occurs.

2. Fixed Costs:

Fixed costs, such as rent, salaries of permanent staff, and depreciation, are treated as period costs and are not considered in the calculation of the cost of production. Fixed costs remain unchanged regardless of the level of production or sales.

3. Contribution Margin:

Contribution margin is calculated by subtracting variable costs from sales revenue. It represents the portion of sales revenue that contributes to covering fixed costs and generating profits. Contribution margin is a key metric used in marginal costing analysis.

Contribution Margin = Sales Revenue - Variable Costs

4. Break-Even Analysis:

Marginal costing facilitates break-even analysis by determining the level of sales at which total revenue equals total variable costs plus fixed costs. This break-even point indicates the level of sales required for the company to cover all its costs and make zero profit.

5. Decision Making:

Marginal costing provides valuable insights for decision-making, such as pricing decisions, product mix decisions, and special order decisions. By focusing on variable costs and contribution margin, managers can evaluate the profitability of different options and make informed decisions to maximize profits.

Advantages of Marginal Costing:

1. Simplicity:

Marginal costing is relatively simple to understand and implement compared to absorption costing, which allocates fixed overhead to products.

2. Decision Relevance:

It provides information that is directly relevant to short-term decision-making, such as pricing, discontinuing products, or accepting special orders.

3. Cost Control:

Marginal costing highlights the impact of changes in production volume on costs, enabling managers to control costs more effectively.

4. Performance Evaluation:

It helps in evaluating the performance of different segments of the business based on contribution margin, which reflects the profitability of each segment.

Limitations of Marginal Costing:

1. Inaccurate Profit Reporting:

Marginal costing does not allocate fixed overhead to products, which can result in inaccurate profit reporting under certain circumstances, especially when inventory levels fluctuate significantly.

2. May Ignore Capacity Utilization:

Marginal costing may ignore the underutilization or overutilization of capacity, which can distort cost and profit figures.

3. Not Suitable for External Reporting:

Marginal costing is not acceptable for external financial reporting purposes, as it does not comply with generally accepted accounting principles (GAAP).

Cost Volume Profit (CVP) Analysis:

CVP stands for Cost-Volume-Profit analysis, which is a managerial accounting technique used to study the relationship between costs, volume, and profits within an organization. It helps managers make informed decisions regarding pricing, production levels, sales mix, and other aspects of business operations.

Components of CVP Analysis:

1. Costs:

CVP analysis categorizes costs into fixed and variable components. Fixed costs remain constant regardless of the level of activity, while variable costs vary in direct proportion to changes in activity levels. Total costs are the sum of fixed costs and variable costs

2. Volume:

Volume refers to the level of activity, such as units produced, units sold, or sales revenue. CVP analysis examines how changes in volume affect costs and profits.

3. Profit:

Profit is the difference between total revenue and total costs. CVP analysis helps managers understand how changes in volume impact profitability and identify the level of sales needed to achieve a target profit.

Concepts in CVP Analysis:

1. Break-Even Point:

The break-even point is the level of sales at which total revenue equals total costs, resulting in zero profit. It is calculated by dividing total fixed costs by the contribution margin per unit or the contribution margin ratio.

2. Contribution Margin:

Contribution margin is the difference between sales revenue and variable costs. It represents the portion of sales revenue that contributes to covering fixed costs and generating profit.

Contribution Margin = Sales Revenue - Variable Costs

3. Contribution Margin Ratio:

The contribution margin ratio is the contribution margin expressed as a percentage of sales revenue. It indicates the proportion of each sales dollar that contributes to covering fixed costs and generating profit.

Contribution Margin Ratio = (Contribution Margin / Sales Revenue) * 100%

4. Margin of Safety:

The margin of safety represents the excess of actual or expected sales over the break-even sales. It indicates the extent to which sales can decline before the company incurs losses.

Margin of Safety = Actual (or Expected) Sales - Break-Even Sales

Applications of CVP Analysis:

1. Pricing Decisions:

CVP analysis helps in determining the optimal selling price by considering the relationship between costs, volume, and profit

2. Product Mix Decisions:

It assists in evaluating the profitability of different product lines and determining the most profitable mix of products.

3. Production Decisions:

CVP analysis helps in deciding the level of production that maximizes profits by considering the trade-off between fixed costs and variable costs.

4. Budgeting and Forecasting:

CVP analysis is used in preparing budgets and financial forecasts to assess the financial implications of different scenarios.

5. Capital Expenditure Decisions:

It helps in evaluating the profitability of investment projects and determining their impact on overall profitability.

Break Even Analysis:

Break-even analysis is a financial technique used to determine the point at which total revenue equals total costs, resulting in zero profit or loss. In other words, it identifies the level of sales, production, or activity at which a business covers all its costs but does not make a profit. The break-even point is a fundamental concept in managerial accounting and is crucial for decision-making regarding pricing, production levels, and business strategy.

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Components of Break-Even Analysis:

1. Fixed Costs (FC):

These are costs that remain constant regardless of the level of production or sales. Examples include rent, salaries of permanent staff, insurance premiums, and depreciation expenses.

2. Variable Costs (VC):

Variable costs are costs that vary in direct proportion to changes in production or sales volume. Examples include direct materials, direct labor, and variable overhead costs

3. Total Costs (TC):

Total costs are the sum of fixed costs and variable costs. It represents the total expenses incurred by the business for a given level of production or sales.

Total Costs (TC) = Fixed Costs (FC) + Variable Costs (VC)

4. Revenue (R):

Revenue is the total income generated from sales of goods or services. It is calculated by multiplying the selling price per unit by the number of units sold.

Revenue (R) = Selling Price per Unit × Number of Units Sold

Problem-1

Sales Rs.12000, Variable Cost Rs.7000, Fixed Cost Rs.4000, Calculate Contribution.

Solution:

C = S – V

= 12000 – 7000 =5000

P = C – F

= 5000 – 4000 = 1000.

Problem -2

Sales Rs.20000, Variable Cost Rs.16000, Calculate P/V Ratio.

Solution:

P/V Ratio = Contribution / Sales * 100

= 4000/20000*100 = 20%.

Problem-3

Total Fixed Cost Rs.12000, Selling Price Rs.12 per unit, Variable Cost Rs.9 per unit, Calculate Break Even Point.

Solution:

Contribution = S –V

=12 – 9 = 3

P/V Ratio = Contribution / Sales * 100

= 3/12*100 = 25%

BEP = Total Fixed Cost / P/V Ratio

= 12000 / 25% = Rs.48000.

Problem - 4

Calculate Margin of safety from the following data-

Sales Rs. 100000

Fixed Assets Rs.30000

Variable Cost Rs.50000

Solution:

MoS = Total Sales – Break Even Sales

Break even Sales = Fixed Costs*Total Sales / Total Sales-Variable Cost

= 30000*100000/100000-50000

= Rs.60000

Therefore, Margin of Safety sales =Rs.100000-Rs.60000 = Rs.40000

Problem-5

From the following particulars, calculate P/V ratio, Break Even Sales and Fixed Costs. Profit Rs.2000 represents 10% of sales. Margin of Safety is Rs.10000.

Solution:

Profit = 10% of sales = 10%%*sales

Sales = Rs.2000/10% =2000/0.1 =Rs.20000.

Margin of Safety Sales = Total Sales-Break Even Sales = Rs.10000

BES = Total Sales-Margin of Safety sales

= Rs.20000-Rs.10000 = Rs.10000

Margin of Safety Sales = Profit / Margin of Safety Sales

= 2000/10000 = 1/5 =0.2 =20%

Break Even Point = Fixed Cost/P/V Ratio

Therefore Fixed Cost =Break Even Point*P/V Ratio

= Rs.10000*20% = Rs.2000.

Problem – 6

From the following particulars of X Ltd, Calculate the Break-Even Point:

Variable Cost per Unit Rs.12, Fixed Cost Rs.60000, Selling Price per unit Rs.18.

Solution:

Contribution = Sales – Variable Cost

= 18 – 12 = 6

BEP (in Units) = Fixed Cost / Contribution per unit

= 60000 / 6 = 10000

BEP (Rs.) = Fixed Cost / P/V Ratio

P/V Ratio = C/S*100

= 6/18*100 =33.33%

= 60000/33.33%

= Rs.180000.

Problem-7

A Company estimates that next year it will earn a profit of Rs.50000. The budgeted fixed costs and sales are Rs.250000 and Rs.993000 respectively. Find out the break-even point for the company.

Solution:

BEP = Fixed Cost / P/V Ratio

Contribution = S – V = F + P

P/V Ratio = C/S*100

C = F + P

= 250000 + 50000

= 300000

P/V Ratio = 300000/993000*100

= 30.21%

BEP = 250000/30.21%

= 827500.

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