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Paper DSE 601 (a) : COST CONTROL AND MANAGEMENT ACCOUNTING

Objective: To be acquaint with Cost Control techniques, Managerial Accounting decision making techniques and reporting methods.

UNIT-I: INTRODUCTION TO MANAGEMENT ACCOUNTING &MARGINAL COSTING:

Meaning and Importance of Management Accounting – Marginal Cost Equation – Difference between Marginal Costing and Absorption Costing – Application of Marginal Costing – CVP Analysis – Break Even Analysis: Meaning – Assumptions – Importance - Limitations. Marginal Costing for Decision Making-Make or Buy – Add or Drop Products – Sell or Process Further – Operate or Shut-down – Special Order Pricing – Replace or Retain.

UNIT-II: BUDGETARY CONTROL AND STANDARD COSTING:

Budget: Meaning – Objectives – Advantages and Limitations – Essentials of Budgets - Budgetary Control - Classification of Budgets - Preparation of Fixed and Flexible Budgets. Standard Costing: Meaning – Importance – Standard Costing and Historical Costing - Steps involved in Standard Costing. Variance Analysis: Material variance - Labour variance - Overhead variance.

UNIT-III: TECHNIQUES OF FINANICAL STATEMENT ANALYSIS:

Meaning – Objectives - Techniques: Comparative Statement, Common Size Statement, Trend Analysis. Ratios- Meaning, Objectives and Classification—Computation of Activity, Liquidity, Solvency and Profitability Ratios.

UNIT-IV: FUNDS FLOW ANANLYSIS:

Concept of Funds – Meaning and Importance – Limitations – Statement of Changes in Working Capital – Statement of Sources and Application of Funds.

UNIT-V: CASH FLOW ANALYSIS (AS-3):

Meaning – Importance – Differences between Funds Flow and Cash Flow Statements – Procedure for preparation of Cash Flow Statement.

UNIT – I

Meaning of Management Accounting

Management accounting, also known as managerial accounting, involves the process of preparing management reports and accounts that provide accurate and timely financial and statistical information to managers. The goal is to enable them to make short-term and long-term decisions. Unlike financial accounting, which focuses on providing information to external parties, management accounting is concerned with internal decision-making and is forward-looking rather than historical.

Key Aspects of Management Accounting

- Planning and Budgeting: Management accounting helps in creating budgets and forecasts. It allows managers to plan for the future by evaluating past performance and predicting future financial outcomes.

- Performance Measurement: It involves assessing the efficiency and effectiveness of operations by comparing actual performance with planned objectives. This helps in identifying variances and taking corrective actions.

- Cost Management: It focuses on controlling and reducing costs by analyzing cost behavior and implementing cost control measures. This ensures that resources are used efficiently.

- Decision Making: Management accounting provides relevant data that assists managers in making informed decisions about pricing, capital investments, and other strategic initiatives.

- Financial Reporting: It involves the preparation of detailed financial reports that provide insights into the financial health of the organization. These reports are used internally for decision-making purposes.

Importance of Management Accounting

- Informed Decision-Making: Management accounting provides critical information that helps managers make informed decisions. This can lead to better resource allocation, investment decisions, and strategic planning.
- Enhanced Efficiency and Control: By analyzing cost and performance data, management accounting helps in identifying inefficiencies and areas where cost control can be improved. This leads to better operational efficiency.
- Strategic Planning: Management accounting supports strategic planning by providing financial analysis and projections. This helps in setting realistic goals and developing strategies to achieve them.

- Performance Evaluation: It helps in evaluating the performance of different departments and employees. This information can be used to reward high performers and address underperformance.

- Budgetary Control: Management accounting is essential for creating and monitoring budgets. It ensures that expenditures are in line with the organization's financial goals and constraints.
- Improved Financial Management: By providing detailed financial insights, management accounting helps in managing cash flows, reducing financial risks, and ensuring the financial stability of the organization.
- Supports Organizational Change: It provides the data needed to support organizational change initiatives. This includes cost-benefit analysis, which is crucial for making changes in processes, structure, or strategy.

Difference b/w Marginal & Absorption costing

Marginal Costing (Variable Costing)

Definition: Marginal costing, also known as variable costing, considers only variable costs (direct materials, direct labor, and variable manufacturing overhead) when calculating the cost of goods sold and inventory valuation. Fixed manufacturing overheads are treated as period costs and expensed in the period incurred.

Cost Components: Includes only variable production costs in product costs. Fixed production costs are not included in product costs but are treated as period costs.

Profit Calculation: Profit is calculated based on contribution margin, which is sales revenue minus variable costs. Fixed costs are then deducted from the total contribution margin to determine net profit.

Inventory Valuation: Inventory is valued at variable production costs only.

Decision Making: Useful for internal decision-making as it provides insights into how variable costs impact profitability and aids in break-even analysis, cost-volume-profit analysis, and shortterm decision-making.

Absorption Costing (Full Costing)
Definition: Absorption costing, also known as full costing, includes all manufacturing costs (both variable and fixed) in the cost of goods sold and inventory valuation. Fixed manufacturing overheads are allocated to each unit produced.

Cost Components: Includes both variable and fixed production costs in product costs. Fixed production costs are allocated to each unit of production and included in inventory costs.

Profit Calculation: Profit is calculated based on gross margin, which is sales revenue minus cost of goods sold (which includes both variable and fixed manufacturing costs).

Inventory Valuation: Inventory is valued at total production costs, including both variable and fixed costs.

Decision Making: Used for external financial reporting as it is required by Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS). It matches all costs of production with revenues for a more comprehensive view of profitability.

Key Differences
Treatment of Fixed Manufacturing Overheads:

Marginal Costing: Treated as period costs and expensed in the period incurred.
Absorption Costing: Allocated to each unit produced and included in inventory valuation.
Inventory Valuation:

Marginal Costing: Inventory valued at variable costs only.
Absorption Costing: Inventory valued at total production costs (variable + fixed). Profit Reporting:

Marginal Costing: Profit varies directly with changes in sales volume since fixed costs are expensed in total.
Absorption Costing: Profit can be influenced by changes in production levels due to the allocation of fixed costs to inventory.
Usefulness:

Marginal Costing: More useful for internal management purposes, especially for decisionmaking, planning, and control.
Absorption Costing: Required for external financial reporting and tax purposes.

Cost-Volume-Profit (CVP) analysis,
It is also known as break-even analysis, is a method used in managerial accounting to understand the relationship between costs, sales volume, and profit. It helps managers make decisions about production levels, pricing, and the selection of product lines.
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Contribution Margin: The difference between the sales price per unit and the variable cost per unit. It represents the amount available to cover fixed costs and contribute to profit.

Contribution Margin=Sales Price per Unit−Variable Cost per Unit
Contribution Margin=Sales Price per Unit−Variable Cost per Unit

Contribution Margin Ratio: The contribution margin expressed as a percentage of sales price.

$$\text{Contribution Margin Ratio} = \frac{\text{Contribution Margin}}{\text{Sales Price per Unit}}$$

$$\text{Contribution Margin Ratio} = \frac{\text{Sales Price per Unit}}{\text{Sales Price per Unit}} - \frac{\text{Contribution Margin}}{}$$

Break-Even Point: The level of sales at which total revenues equal total costs, resulting in zero profit. It can be calculated in units or sales dollars.

$$\text{Break-Even Point (units)} = \frac{\text{Fixed Costs}}{\text{Contribution Margin per Unit}}$$

$$\text{Break-Even Point (units)} = \frac{\text{Contribution Margin per Unit}}{\text{Fixed Costs}}$$

$$\text{Break-Even Point (sales dollars)} = \text{Fixed Costs} \div \text{Contribution Margin Ratio}$$

$$\text{Break-Even Point (sales dollars)} = \text{Contribution Margin Ratio} \div \text{Fixed Costs}$$

Key Concepts

Break-Even Analysis: Determines the number of units that must be sold to cover all costs (fixed and variable). This is crucial for understanding the minimum performance needed to avoid losses.

Target Profit Analysis: Calculates the sales volume required to achieve a specific profit target.

$$\text{Required Sales (units)} = \text{Fixed Costs} + \text{Target Profit} \div \text{Contribution Margin per Unit}$$

$$\text{Required Sales (units)} = \text{Contribution Margin per Unit} \div \text{Fixed Costs Target Profit}$$

$$\text{Required Sales (sales dollars)} = \frac{\text{Fixed Costs + Target Profit}}{\text{Contribution Margin Ratio}}$$

$$\text{Required Sales (sales dollars)} = \frac{\text{Contribution Margin Ratio}}{\text{Fixed Costs + Target Profit}}$$

Margin of Safety: Measures how much sales can drop before the company reaches its break-even point. It is an indicator of risk.

$$\text{Margin of Safety (units)} = \text{Actual Sales} - \text{Break-Even Sales}$$
$$\text{Margin of Safety (units)} = \text{Actual Sales} - \text{Break-Even Sales}$$

$$\text{Margin of Safety (percentage)} = \frac{\text{Margin of Safety (units)}}{\text{Actual Sales}}$$

$$\text{Margin of Safety (percentage)} = \frac{\text{Actual Sales}}{\text{Margin of Safety (units)}}$$

Break-Even Analysis Meaning

Break-even analysis is a financial tool used to determine the point at which total revenue equals total costs, resulting in neither profit nor loss. This point is known as the break-even point (BEP). It is a fundamental aspect of cost-volume-profit (CVP) analysis and helps businesses understand the minimum sales required to cover their fixed and variable costs.

Importance

- Financial Planning and Control: Break-even analysis aids in financial planning by providing insights into the relationship between cost, volume, and profit. It helps managers set sales targets to ensure profitability.

- Decision Making: Helps in making informed decisions about pricing, production levels, and product mix. Managers can determine the impact of changes in costs, sales volume, and prices on profitability.
- Profit Planning: Assists in profit planning by identifying the sales volume needed to achieve desired profit levels. This is crucial for setting realistic financial goals.
- Cost Management: Highlights the importance of controlling fixed and variable costs. It helps managers understand the cost structure and focus on areas where cost reductions are possible.
- Risk Assessment: Provides a margin of safety, indicating how much sales can drop before reaching the break-even point. This helps in assessing the risk of business operations.

Limitations

- Assumptions of Linear Costs and Revenue:
  Break-even analysis assumes that costs and revenues are linear and remain constant, which may not be realistic. In reality, variable costs per unit may change with production levels, and prices may fluctuate.
- Fixed Costs Remain Constant:
  The analysis assumes fixed costs remain constant over the relevant range of activity. However, fixed costs can change with significant changes in production levels or business scale.
- Single Product Analysis:
  Traditional break-even analysis is easier to apply to single-product scenarios. For companies with multiple products, the analysis becomes more complex and may require weighted averages for contribution margins.
- Ignores Changes in Inventory Levels:
  It assumes that all units produced are sold, ignoring changes in inventory levels. This can lead to inaccuracies if there are significant variations in inventory.

- Short-Term Focus:
  Break-even analysis is more suited for short-term decision-making and may not account for long-term financial planning and strategic decisions.
- External Factors:
  The analysis does not consider external factors such as market conditions, competition, economic changes, and regulatory impacts, which can significantly affect sales and costs.

Marginal costing for decision making

Marginal costing, also known as variable costing, is a useful approach for decisionmaking in various business scenarios. It focuses on the behavior of costs in relation to changes in production and sales volume. By considering only the variable costs directly associated with production, marginal costing provides valuable insights for short-term financial decisions. Here are several ways in which marginal costing aids in decisionmaking:

1. **Make or Buy Decisions**
Marginal costing helps determine whether it is more cost-effective to manufacture a product in-house or to purchase it from an external supplier. The analysis involves comparing the variable cost of manufacturing with the purchase price from the supplier.

Relevant Cost of Making=Variable Costs +Avoidable Fixed Costs
If the cost of making the product is lower than the purchase price, it is preferable to manufacture in-house.

2. **Pricing Decisions**
Marginal costing assists in setting prices for products, especially in competitive markets or for special orders. By understanding the contribution margin (sales price minus variable cost), businesses can determine the minimum price at which they can sell their products without incurring a loss.

Minimum Price=Variable Cost per Unit+ Desired Contribution Margin
This is particularly useful in situations where a company needs to set prices for one-time orders or to enter a new market.

3. **Product Mix Decisions**
When a company produces multiple products, marginal costing helps in deciding the optimal product mix to maximize profits. By analyzing the contribution margin per unit of each product and considering any constraints (e.g., production capacity, labor hours), businesses can prioritize products with higher contribution margins.

$$\text{Contribution Margin per Unit of Limiting Factor} = \frac{\text{Contribution Margin per Unit}}{\text{Units of Limiting Factor per Unit}}$$

The product with the highest contribution margin per unit of the limiting factor should be produced first.

4. **Shutdown Decisions**
Marginal costing can help determine whether to continue operations or shut down temporarily. If the contribution margin is sufficient to cover fixed costs and provide a profit, the business should continue operating. Otherwise, it may be better to shut down temporarily.

Shutdown Decision=Contribution Margin−Fixed Costs
If the result is negative, it may be more economical to cease operations temporarily.

5. **Break-Even Analysis**
Marginal costing is fundamental for conducting break-even analysis, which helps businesses determine the sales volume needed to cover all costs (both fixed and variable). This is crucial for setting sales targets and planning production levels.

Break-Even Point (units)= Fixed Costs

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Contribution Margin per Unit

6. **Evaluating the Impact of Changes**
Marginal costing allows businesses to evaluate the financial impact of changes in production volume, costs, or selling prices. By analyzing how these changes affect the contribution margin, companies can make informed decisions about scaling production, adjusting prices, or implementing cost-saving measures.

7. **Profit Planning**
Using marginal costing, businesses can plan for desired profit levels by determining the necessary sales volume to achieve target profits.

Required Sales Volume = Fixed Costs +Target Profit

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Contribution Margin per Unit

UNIT-II: BUDGETARY CONTROL AND STANDARD COSTING:

Budget: Meaning – Objectives – Advantages and Limitations – Essentials of Budgets - Budgetary Control - Classification of Budgets - Preparation of Fixed and Flexible Budgets. Standard Costing: Meaning – Importance – Standard Costing and Historical Costing - Steps involved in Standard Costing. Variance Analysis: Material variance - Labour variance - Overhead variance.

Budgets are financial plans that outline an organization's expected revenues and expenditures over a specific period, usually a fiscal year. They are essential tools for planning, coordination, control, and performance evaluation within an organization. Here's an overview of the meaning, objectives, advantages, and limitations of budgets:

Meaning of Budgets
A budget is a quantified financial plan for a forthcoming accounting period. It is an estimation of revenue and expenses over a specified future period and is usually compiled and re-evaluated on a periodic basis. Budgets can be made for a person, family, group of people, business, government, or anything else that makes and spends money.

Objectives of Budgets

- Planning: To provide a detailed plan of action for achieving financial goals.
- Coordination: To align the activities and efforts of various departments and units within an organization.
- Resource Allocation: To ensure optimal allocation of resources by identifying and prioritizing needs.
- Control: To set benchmarks for performance and establish control mechanisms to ensure adherence to plans.
- Performance Evaluation: To measure actual performance against the budgeted figures and identify variances.
- Motivation: To motivate managers and employees by setting performance targets.

Advantages of Budgets

- Improved Planning: Encourages systematic planning and future-oriented thinking.
- Enhanced Coordination: Promotes coordination among various departments and units.
- Resource Optimization: Facilitates efficient allocation and utilization of resources.
- Performance Monitoring: Provides benchmarks for evaluating performance and identifying areas of improvement.
- Cost Control: Helps in controlling costs by setting expenditure limits.
- Goal Setting and Achievement: Aids in setting financial goals and formulating strategies to achieve them.
- Decision Making: Assists management in making informed financial decisions.

Limitations of Budgets

- Rigidity: Can be inflexible and may not accommodate unforeseen changes and emergencies.
- Time-Consuming: The budgeting process can be time-consuming and may require significant effort.
- Inaccuracy: Based on estimates and assumptions, which may lead to inaccuracies if conditions change.
- Conflict: May cause conflicts among departments competing for limited resources.
- Short-Term Focus: Often focuses on short-term financial goals at the expense of long-term strategic objectives.
- Employee Resistance: May face resistance from employees if perceived as a means of control rather than a tool for improvement.
- Overemphasis on Financials: May lead to an excessive focus on financial metrics, neglecting qualitative aspects like customer satisfaction or employee morale.

In summary, while budgets are crucial for planning and controlling organizational finances, they must be used flexibly and complemented with other management tools to address their limitations.

ESSENTIALS OF BUDGET

1. Clear Objectives

- Defined Goals: Establish clear, realistic, and measurable goals for the budgeting period.
- Alignment with Strategy: Ensure the budget aligns with the overall strategic objectives of the organization.

2. Accurate Data

   - Historical Data: Use past financial data to inform future projections.
   - Market Analysis: Incorporate current market conditions and trends.
   - Assumptions: Clearly state the assumptions on which the budget is based (e.g., economic conditions, market trends, operational changes).

3. Comprehensive Coverage

   - Revenue Projections: Estimate all potential revenue sources, considering different scenarios.
   - Expense Estimates: Detail all expected expenses, both fixed and variable.
   - Capital Expenditures: Include planned investments in assets and infrastructure.
   - Cash Flow: Plan for cash inflows and outflows to ensure liquidity.

4. Realistic Projections

   - Conservative Estimates: Use conservative estimates to avoid over-optimism.
   - Contingencies: Include contingencies for unexpected expenses or revenue shortfalls.

5. Flexibility

   - Adjustable Plans: Design the budget to be flexible enough to adapt to changing circumstances.
   - Scenario Planning: Prepare for different scenarios, including best-case, worst-case, and mostlikely outcomes.

6. Detailed Documentation

   - Comprehensive Breakdown: Provide a detailed breakdown of all budget items.
   - Supporting Documentation: Include supporting documents, such as quotes, contracts, and historical data.

7. Stakeholder Involvement

   - Collaborative Process: Involve key stakeholders in the budgeting process to ensure buy-in and accuracy.
   - Communication: Clearly communicate the budget to all relevant parties.

8. Monitoring and Control

   - Performance Metrics: Establish metrics and benchmarks for monitoring performance.
   - Regular Reviews: Conduct regular reviews and updates of the budget to track progress and make necessary adjustments.
   - Variance Analysis: Analyze variances between budgeted and actual figures to understand the reasons behind them and take corrective action.

9. Technology and Tools

    - Budgeting Software: Utilize budgeting software and tools to enhance accuracy and efficiency.
    - Data Analytics: Leverage data analytics to gain insights and improve forecasting.

10. Legal and Compliance Considerations

    - Regulatory Compliance: Ensure the budget complies with relevant laws and regulations.
    - Financial Reporting Standards: Adhere to applicable financial reporting standards and practices.

11. Documentation and Communication

    - Documentation: Maintain thorough documentation of all budget assumptions, calculations, and decisions.
    - Communication Plan: Develop a communication plan to share the budget with relevant stakeholders and ensure understanding.

By focusing on these essentials, organizations can create effective and practical budgets that serve as valuable tools for financial planning, decision-making, and performance management**.**

BUDGETARY CONTROL

Budgetary control is a comprehensive process that involves the continuous comparison of actual financial results with the planned budget, allowing for corrective actions to be taken whenever necessary. It is a crucial aspect of financial management in any organization.

Meaning of Budgetary Control

Budgetary control is a management technique that uses budgets for planning, coordinating, and controlling various activities within an organization. It involves setting budgets, monitoring actual performance, and making adjustments to ensure that organizational goals and objectives are achieved efficiently and effectively.

Advantages of Budgetary Control

- Improved Financial Management
  Ensures better management of finances by continuously monitoring and controlling expenditures and revenues.
- Enhanced Coordination
  Promotes coordination among different departments by aligning their activities with the overall organizational goals.
- Cost Control
  Helps in identifying and controlling costs, thus preventing overspending and waste.
- Performance Measurement
  Provides a benchmark against which actual performance can be measured, helping to identify variances and areas for improvement.

- Accountability
  Establishes clear responsibility and accountability for budgetary performance among managers and employees.
- Informed Decision Making
  Facilitates informed decision-making by providing relevant financial information and insights.
- Resource Allocation
  Ensures optimal allocation and utilization of resources by prioritizing activities based on their importance and contribution to organizational goals.

- Motivation
  Motivates employees and managers to achieve budgetary targets, fostering a sense of ownership and commitment.

Disadvantages of Budgetary Control

- Rigidity: Can lead to inflexibility, making it difficult to adapt to unexpected changes or opportunities.
- Time-Consuming: The process of preparing and maintaining budgets can be time-consuming and resource-intensive.
- Inaccuracy: Budgets are based on estimates and assumptions, which may not always be accurate, leading to variances and potential misguidance.
- Short-Term Focus : May encourage a short-term focus on meeting budgetary targets at the expense of long-term strategic goals.
- Conflict : Can create conflicts among departments and managers competing for limited resources.
- Discourages Innovation : Strict adherence to budgets may discourage innovation and risk-taking, as managers may be reluctant to deviate from the plan.
- Employee Resistance : Employees and managers may resist budgetary controls if they perceive them as restrictive or as tools for exerting excessive control.
- Overemphasis on Financials : May lead to an overemphasis on financial metrics, neglecting nonfinancial aspects such as customer satisfaction, employee morale, and innovation.

In conclusion, while budgetary control is a valuable tool for financial management and organizational efficiency, it needs to be implemented with flexibility and consideration of its potential drawbacks. Balancing strict control with adaptability and fostering a positive attitude towards budgeting among employees can help in maximizing the benefits of budgetary control.

CLASSIFICATION OF BUDGETS

1. Classification Based on Time Period

- Short-Term Budgets: Typically cover a period of one year or less. These include monthly or quarterly budgets.

- Long-Term Budgets: Extend beyond one year, often covering periods of three, five, or even ten years. These are often used for strategic planning and long-term investments.

2. Classification Based on Function

- Operating Budgets: Related to the day-to-day operations of the organization. Examples include sales budgets, production budgets, and expense budgets.
- Sales Budget: Estimates future sales in units and dollars.
- Production Budget: Plans the quantity of products to be manufactured.
- Expense Budget: Projects operating expenses for departments or activities.
- Financial Budgets: Focus on the financial aspects of the business. Examples include cash budgets, capital expenditure budgets, and balance sheet budgets.
- Cash Budget: Forecasts cash inflows and outflows to ensure liquidity.
- Capital Expenditure Budget: Plans for long-term investments in assets and infrastructure.
- Balance Sheet Budget: Projects future financial position by estimating assets, liabilities, and equity.

3. Classification Based on Flexibility

- Fixed (Static) Budgets: Prepared for a single level of activity and do not change with variations in activity levels.
- Flexible (Variable) Budgets: Adjust according to changes in the level of activity or volume. Useful for performance evaluation under different conditions.

4. Classification Based on Nature

- Revenue Budgets: Estimate the expected revenues from various sources.
- Expenditure Budgets: Estimate the expected expenditures for various purposes.
- Profit Budgets: Estimate the expected profits by considering revenues and expenditures.

5. Classification Based on Scope

- Master Budget: A comprehensive budget that combines all individual budgets related to sales, production, expenses, and financial aspects into one overall plan.
- Departmental Budgets: Specific to individual departments within the organization.

6. Classification Based on Control Technique
- Zero-Based Budgeting (ZBB): Each new period's budget starts from zero and every expense must be justified, rather than basing it on previous periods' budgets.
- Incremental Budgeting: Previous period’s budget is used as a base, with incremental increases or decreases for the new period.

7. Classification Based on Activity Level

- Activity-Based Budgets: Based on activities that incur costs, emphasizing cost drivers and focusing on managing activities rather than just costs.
- Performance Budgets: Focus on the output and outcomes of the activities. Often used in public sector organizations to link the expenditure to the performance outcomes.

8. Classification Based on Ownership

- Participative Budgets: Developed with input from lower-level employees, encouraging involvement and commitment.
- Imposed Budgets: Developed by top management and imposed on lower levels, with less input from those responsible for implementation.

Each type of budget serves a specific purpose and can be used in different contexts to enhance planning, control, and decision-making within an organization. By understanding and appropriately applying various types of budgets, organizations can better manage their resources and achieve their financial and operational goals.

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 [A]	7,25,000	11,60,000	14,50,000

Factory Expenses 50% Fixed (50,000)	25,000	40,000	50,000
Factory Cost [B]	7,75,000	12,25,000	15,25,000
Admin Exp 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**

STANDARD COSTING

Standard costing is a management accounting technique used to estimate the cost of a product or service based on predetermined standards for factors such as material, labour, and overhead. These predetermined standards are established through careful analysis of past performance, industry benchmarks, and future expectations.

Standard costing is a method used in cost accounting to establish predetermined, standard costs for manufacturing a product or providing a service. These standard costs are based on various factors such as materials, labour, and overhead, and are set before production begins. The purpose of standard costing is to provide a benchmark against which actual costs can be compared, enabling managers to evaluate performance, control costs, make decisions, and plan budgets more effectively. By analysing the differences between standard costs and actual costs, managers can identify areas of inefficiency or improvement within the organization.

Importance of standard costing

1. **Cost Control**: Standard costing provides a benchmark against which actual costs can be compared. Any variations from the standard can be investigated, helping managers identify inefficiencies or areas for improvement.

2. **Performance Evaluation**: By comparing actual costs to standard costs, managers can assess the performance of various departments, products, or processes. This evaluation can help in making informed decisions about resource allocation and process improvements.
3. **Budgeting and Planning**: Standard costing provides a basis for preparing budgets and forecasts. It helps in setting realistic targets for costs and revenues, enabling better financial planning and resource allocation.
4. **Decision Making**: Standard costing provides managers with reliable cost information for decision-making purposes. Whether it's pricing decisions, make-or-buy decisions, or investment decisions, having accurate cost estimates is crucial.
5. **Inventory Valuation**: Standard costing is often used for valuing inventory for financial reporting purposes. By applying standard costs to the units of inventory, companies can determine the cost of goods sold and the value of ending inventory more accurately.
6. **Motivation and Incentives**: Standard costing can be linked to performance-based incentives and bonuses. Employees are motivated to meet or exceed the standards, which can lead to improved efficiency and cost savings.

Advantages:

1. **Cost Control**: Standard costing provides a benchmark against which actual costs can be compared, allowing for better cost control. Any variations can be identified and investigated promptly.
2. **Performance Measurement**: It aids in evaluating performance by comparing actual costs with standard costs. This facilitates the identification of areas where performance is deviating from expectations.
3. **Budgeting**: Standard costing provides a basis for budgeting. By setting standard costs for materials, labor, and overheads, organizations can develop more accurate budgets.
4. **Decision Making**: It assists in decision-making processes such as pricing, product mix, and make-or-buy decisions. Managers can make informed decisions by considering the standard costs and their variations.
5. **Motivation and Incentives**: Standard costing can be used as a basis for performance evaluation and incentivizing employees. Setting achievable standards can motivate employees to meet or exceed expectations.

Limitations:

1. **Assumption of Stability**: Standard costing assumes that the production process, materials, and labour costs remain stable. In reality, these factors may fluctuate due to various external and internal factors, rendering the standards outdated or inaccurate.
2. **Rigidity**: Standard costing can be rigid and may not adapt well to changes in production methods, technology, or market conditions. This rigidity can lead to inaccurate cost information and ineffective decision-making.
3. **Focus on Variances**: While variances highlight deviations from standards, they may not always provide meaningful insights into the causes of these variations. Managers may spend considerable time investigating variances without addressing underlying issues.

4. **Complexity**: Implementing standard costing systems can be complex and timeconsuming, especially in large organizations with diverse product lines and production processes. Maintaining accurate standards requires continuous monitoring and updates.
5. **Incentive Misalignment**: If standard costs are set too high or too low, they can create misaligned incentives for employees. Unrealistic standards may demotivate employees or encourage unethical behaviour to meet targets.
6. **Costly Implementation**: The initial implementation of standard costing systems can be expensive, requiring investments in training, software, and systems. Small businesses or those with limited resources may find it challenging to adopt standard costing effectively.

VARIANCE ANALYSIS

Variance analysis is a technique used in managerial accounting to identify and analyze the differences between planned or standard costs and actual costs. It helps organizations understand the reasons behind discrepancies and take corrective actions as necessary. Here's an overview of variance analysis:

1. **Standard Costs**: Variance analysis starts with establishing standard costs for various elements such as materials, labour, and overheads. These standards are based on historical data, industry norms, engineering estimates, and other relevant factors.
2. **Actual Costs**: Once production or operations are underway, actual costs are recorded for each cost element. These costs include actual material costs, labour costs, and overhead costs incurred during the period.
3. **Calculation of Variances**: Variances are calculated by comparing actual costs with standard costs. There are typically two types of variances:

   a. **Direct Material Variances**: These variances compare actual material costs with standard material costs. They include: ○ Material Price Variance: The difference between the actual price paid for materials and the standard price expected. ○ Material Usage Variance: The difference between the actual quantity of materials used and the standard quantity expected for production.

   b. **Direct Labor Variances**: These variances compare actual labour costs with standard labour costs. They include: ○ Labor Rate Variance: The difference between the actual labour rate paid and the standard labour rate. ○ Labor Efficiency Variance: The difference between the actual hours worked and the standard hours allowed for production.

c. **Overhead Variances**: These variances compare actual overhead costs with standard overhead costs. They include: ○ Variable Overhead Spending Variance: The difference between actual variable overhead costs and standard variable overhead costs. ○ Variable Overhead Efficiency Variance: The difference between the actual level of activity and the standard level of activity, multiplied by the standard variable overhead rate. ○ Fixed Overhead Spending Variance: The difference between actual fixed overhead costs and budgeted fixed overhead costs. ○ Fixed Overhead Volume Variance: The difference between budgeted fixed overhead costs and the standard fixed overhead costs applied based on the standard activity level.

4. **Analysis of Variances**: Once variances are calculated, they are analyzed to determine the reasons behind the differences between actual and standard costs. This analysis may involve reviewing production processes, purchasing practices, labour efficiency, material quality, and other factors contributing to the variances.
5. **Corrective Actions**: Based on the analysis, management takes corrective actions to address unfavourable variances or reinforce positive variances. These actions may include process improvements, cost reduction measures, renegotiating supplier contracts, training programs, or revising standards if necessary.
6. **Continuous Improvement**: Variance analysis is not a one-time exercise but a continuous process. Organizations use feedback from variance analysis to refine their standards, improve processes, and enhance cost management practices over time.

1. Material cost variance = (Standard quality for actual output x Standard price) - (Actual quantity x Actual price)

2. Material price variance = Actual quantity (Standard price - Actual price)

3. Material quantity = Standard price (Standard quantity - Actual quantity)

4. MUV = (Actual Quantity × Standard Price) - (Standard Quantity × Standard Price)

5. Material Mix Variance (MMV) = (Actual Mix Quantity - Standard Mix Quantity) × Standard Price per unit

6. Material Yield Variance (MYV) = (Actual Yield - Standard Yield) × Standard Price per unit

Labour variances

7. Labour Cost Variance = Standard Cost of Labour – Actual Cost of Labour.

8. Labour Rate of Pay Variance = Actual Time Taken (Standard Rate – Actual Rate).

9. **Labour Efficiency Variance = Standard Rate (Standard Time for Actual Output – Actual Time worked for)**

   Actual Time worked means actual labour hours spent minus abnormal idle hours.

10. **Idle Time Variance = Abnormal Idle Time x Standard Rate**

    Or Idle Time Variance = St. Rate (Actual Hours Worked – Actual Hours Paid)

UNIT III

UNIT-III: TECHNIQUES OF FINANICAL STATEMENT ANALYSIS:

Meaning – Objectives - Techniques: Comparative Statement, Common Size Statement, Trend Analysis.

Ratios- Meaning, Objectives and Classification—Computation of Activity, Liquidity, Solvency and Profitability Ratios.

Financial statement analysis

Financial statement analysis is the process of reviewing and analyzing a company's financial statements (such as the balance sheet, income statement, and cash flow statement) to gain insights into its financial health, performance, and viability. The primary goal of financial statement analysis is to assess the company's past, present, and future financial position and performance, and to make informed decisions based on this analysis.

- **Assessing Financial Health**: By examining various financial ratios and metrics, analysts can evaluate a company's liquidity, solvency, profitability, and efficiency. This helps stakeholders understand the company's ability to meet its short-term and long-term financial obligations.
- **Identifying Trends and Patterns**: Analyzing financial statements over multiple periods allows for the identification of trends and patterns in the company's financial performance. This can reveal underlying factors driving the company's growth or decline.

- **Comparing Against Peers**: Financial statement analysis often involves benchmarking a company's performance against industry peers or competitors. This comparative analysis provides context and helps identify areas where the company may be outperforming or underperforming relative to its peers

-
- **Forecasting Future Performance**: By understanding historical financial performance and market trends, analysts can make informed forecasts about a company's future financial performance. This is essential for investors, creditors, and management in making strategic decisions.
-
- **Detecting Financial Irregularities**: Financial statement analysis can also help detect potential financial irregularities or warning signs of financial distress, such as inconsistencies in accounting practices, unusual fluctuations in key financial metrics, or signs of earnings manipulation.

FINANCIAL STATEMENT ANALYSIS OBJECTIVES

Financial statement analysis serves several key objectives, each essential for different stakeholders such as investors, creditors, management, and regulatory bodies. Here are the primary objectives of financial statement analysis:

1. **Assessing Financial Performance**: One of the primary objectives is to evaluate the financial performance of a company over a specific period. This involves analyzing profitability, liquidity, solvency, and efficiency ratios to gauge how well the company is utilizing its resources and generating profits.
2. **Evaluating Financial Health**: Financial statement analysis helps in assessing the overall financial health and stability of a company. By examining key financial indicators, stakeholders can determine the company's ability to meet its short-term and long-term financial obligations.
3. **Making Investment Decisions**: Investors use financial statement analysis to make informed decisions about buying, holding, or selling a company's stock or bonds. By assessing factors such as profitability, growth potential, and risk, investors can determine whether the company represents a good investment opportunity.
4. **Assessing Creditworthiness**: Creditors and lenders analyze financial statements to evaluate a company's creditworthiness and determine its ability to repay loans or meet other financial obligations. They assess factors such as liquidity, leverage, and cash flow to determine the level of risk associated with lending to the company.

5. **Facilitating Strategic Planning**: Management uses financial statement analysis to inform strategic planning and decision-making processes. By identifying strengths, weaknesses, opportunities, and threats, management can develop strategies to improve financial performance, allocate resources effectively, and achieve long-term objectives.
6. **Benchmarking Performance**: Financial statement analysis allows companies to benchmark their performance against industry peers or competitors. By comparing financial ratios and metrics, companies can identify areas of strength and weakness and gain insights into best practices and areas for improvement.
7. **Complying with Regulatory Requirements**: Companies are required to prepare and disclose financial statements in accordance with accounting standards and regulatory requirements. Financial statement analysis helps ensure compliance with these standards and provides transparency to investors and regulators.

Financial statement analysis involves various techniques to evaluate a company's financial performance, health, and prospects. These techniques help stakeholders gain insights into key aspects of the company's operations and financial position. Here are some common techniques used in financial statement analysis:

1. **Ratio Analysis**: Ratio analysis involves calculating and interpreting various financial ratios to assess different aspects of a company's performance. Common ratios include profitability ratios (e.g., return on equity, gross profit margin), liquidity ratios (e.g., current ratio, quick ratio), solvency ratios (e.g., debt-to-equity ratio, interest coverage ratio), and efficiency ratios (e.g., inventory turnover, accounts receivable turnover).
2. **Common-Size Analysis**: Common-size analysis involves expressing financial statement items as a percentage of a base figure, typically total revenue for the income statement and total assets for the balance sheet. This technique helps in comparing the relative size of different components of the financial statements and identifying trends over time.
3. **Trend Analysis**: Trend analysis involves comparing financial data over multiple periods to identify patterns, trends, and changes in performance. By analysing trends in revenues, expenses, and other financial metrics, stakeholders can assess the company's growth trajectory and financial stability.
4. **Vertical Analysis**: Vertical analysis involves expressing each line item in the financial statements as a percentage of a base figure within the same period. For example, in the income statement, each expense item is expressed as a percentage of total revenue. This technique helps in understanding the composition of expenses and revenues relative to total income or assets.
5. **Horizontal Analysis**: Horizontal analysis, also known as trend analysis, involves comparing financial data across multiple periods to identify changes and trends over time. By analysing changes in key financial metrics such as revenues, expenses, and net income, stakeholders can assess the company's performance and financial health over time.
6. **Cash Flow Analysis**: Cash flow analysis involves examining the company's cash flow statement to assess its ability to generate cash from operating activities, invest in capital

expenditures, and finance its operations and growth. By analyzing cash flow patterns and trends, stakeholders can evaluate the company's liquidity and cash management practices.

7. **DuPont Analysis**: DuPont analysis breaks down the return on equity (ROE) into its component parts, including net profit margin, asset turnover, and financial leverage. This technique helps in understanding the drivers of ROE and identifying areas for improvement in profitability, asset utilization, and leverage.
8. **Peer Comparison**: Peer comparison involves benchmarking a company's financial performance against that of its industry peers or competitors. By comparing financial ratios, growth rates, and other performance metrics, stakeholders can assess the company's relative position within the industry and identify areas of strength and weakness.

These techniques are essential tools for investors, creditors, analysts, and management in evaluating a company's financial performance, health, and prospects, and making informed decisions.

Format of Common-size Income Statement (Statement of Profit & Loss):

Common-size Income Statement for the year ended ...

Particulars	Note No.	Absolute Amounts		Percentage of Revenue from Operations (Net Sales)	
		Figures for the Previous Year (₹)	Figures for the Current Year (₹)	Previous Year (%)	Current Year (%)
I. Revenue from Operations (Net Sales)		XXXX	XXXX	100	100
II. Other Income		XXXX	XXXX	XX	XX
III. **Total Revenue (I + II)**		**XXXX**	**XXXX**	**XX**	**XX**
IV. **Expenses**					
a) Cost of Materials Consumed		XXXX	XXXX	XX	XX
b) Purchase of Stock-in-Trade		XXXX	XXXX	XX	XX
c) Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade		XXXX	XXXX	XX	XX
d) Employees Benefit Expenses		XXXX	XXXX	XX	XX
e) Finance Costs		XXXX	XXXX	XX	XX
f) Depreciation and Amortisation Expenses		XXXX	XXXX	XX	XX
g) Other Expenses		XXXX	XXXX	XX	XX
Total Expenses		**XXXX**	**XXXX**	**XX**	**XX**
V. **Profit before Tax (III-IV)**		XXXX	XXXX	XX	XX
VI. Less: Income Tax		XXXX	XXXX	XX	XX
VII. **Profit after Tax (V - VI)**		**XXXX**	**XXXX**	**XX**	**XX**

Common-size Balance Sheet
as on .....

Particulars	Note No.	Absolute Amounts		Percentage of Balance Sheet Total	
		Figures as at the end of Previous Year ₹	Figures as at the end of Current Year ₹	Previous Year %	Current Year %
(1)	(2)	(3)	(4)	(5)	(6)
I. Equity and Liabilities:					
1. Shareholder's Funds:					
a) Share Capital:					
i) Equity Share Capital		XXXX	XXXX	XX	XX
ii) Preference Share Capital		XXXX	XXXX	XX	XX
b) Reserves & Surplus		XXXX	XXXX	XX	XX
2. Non-current Liabilities:					
a) Long-term Borrowings		XXXX	XXXX	XX	XX
b) Long-term Provisions		XXXX	XXXX	XX	XX
3. Current Liabilities:					
a) Short-term Borrowings		XXXX	XXXX	XX	XX
b) Trade Payables		XXXX	XXXX	XX	XX
c) Other Current Liabilities		XXXX	XXXX	XX	XX
d) Short-term Provisions		XXXX	XXXX	XX	XX
Total		**XXXX**	**XXXX**	**100**	**100**
II. Assets:					
1. Non-Current Assets:					
a) Property, Plant and Equipment and Intangible Assets:					
i) Property, Plant, and Equipment		XXXX	XXXX	XX	XX
ii) Intangible Assets		XXXX	XXXX	XX	XX
b) Non-current Investments		XXXX	XXXX	XX	XX
c) Long-term Loans and Advances		XXXX	XXXX	XX	XX
2. Current Assets:					
a) Current Investments		XXXX	XXXX	XX	XX
b) Inventories		XXXX	XXXX	XX	XX
c) Trade Receivables		XXXX	XXXX	XX	XX
d) Cash & Cash Equivalents		XXXX	XXXX	XX	XX
e) Short-term Loans and Advances		XXXX	XXXX	XX	XX
f) Other Current Assets		XXXX	XXXX	XX	XX
Total		**XXXX**	**XXXX**	**100**	**100**

Format of Comparative Balance Sheet:

Comparative Balance Sheet as at .....

Particulars (1)	Note No. (2)	Previous Year ₹ (A) (3)	Current Year ₹ (B) (4)	Absolute Change (Increase/Decrease) ₹ (C= B - A) (5)	Percentage Change (Increase/Decrease) % (D = C/A X 100) (6)
I. Equity and Liabilities:					
1. Shareholder's Funds:					
a) Share Capital:					
i) Equity Share Capital		XXXX	XXXX	XXXX	XX
ii) Preference Share Capital		XXXX	XXXX	XXXX	XX
b) Reserves & Surplus		XXXX	XXXX	XXXX	XX
2. Non-current Liabilities:					
a) Long-term Borrowings		XXXX	XXXX	XXXX	XX
b) Long-term Provisions		XXXX	XXXX	XXXX	XX
3. Current Liabilities:					
a) Short-term Borrowings		XXXX	XXXX	XXXX	XX
b) Trade Payables		XXXX	XXXX	XXXX	XX
c) Other Current Liabilities		XXXX	XXXX	XXXX	XX
d) Short-term Provisions		XXXX	XXXX	XXXX	XX
Total		**XXXX**	**XXXX**	**XXXX**	**XX**
II. Assets:					
1. Non-Current Assets:					
a) Property, Plant and Equipment, and Intangible Assets*:					
i) Property, Plant and Equipment*		XXXX	XXXX	XXXX	XX
ii) Intangible Assets		XXXX	XXXX	XXXX	XX
b) Non-current Investments		XXXX	XXXX	XXXX	XX
c) Long-term Loans and Advances		XXXX	XXXX	XXXX	XX
2. Current Assets:					
a) Current Investments		XXXX	XXXX	XXXX	XX
b) Inventories		XXXX	XXXX	XXXX	XX
c) Trade Receivables		XXXX	XXXX	XXXX	XX
d) Cash & Cash Equivalents		XXXX	XXXX	XXXX	XX
e) Short-term Loans and Advances		XXXX	XXXX	XXXX	XX
f) Other Current Assets		XXXX	XXXX	XXXX	XX
Total		**XXXX**	**XXXX**	**XXXX**	**XX**

Format of Comparative Income Statement (Statement of Profit & Loss):

Comparative Statement of Profit & Loss for the year ended .....

Particulars (1)	Note No. (2)	Figures for the Previous Year ₹ (3)	Figures for the Current Year ₹ (4)	Absolute Change (Increase/Decrease) ₹ (5)	Percentage Change (Increase/Decrease) % (6)
		(A)	(B)	(C = B - A)	(D = C/A x 100)
I. Revenue from Operations		XXXX	XXXX	XXXX	XX
II. Other Income		XXXX	XXXX	XXXX	XX
III. Total Revenue (I + II)		**XXXX**	**XXXX**	**XXXX**	**XX**
IV. **Expenses:**					
a) Cost of Materials Consumed		XXXX	XXXX	XXXX	XX
b) Purchases of Stock-in-Trade		XXXX	XXXX	XXXX	XX
c) Changes in Inventories of Finished Goods, Work-in-Progress and Stock-in-Trade		XXXX	XXXX	XXXX	XX
d) Employees Benefit Expenses		XXXX	XXXX	XXXX	XX
e) Finance Costs		XXXX	XXXX	XXXX	XX
f) Depreciation and Amortisation Expenses		XXXX	XXXX	XXXX	XX
g) Other Expenses		XXXX	XXXX	XXXX	XX
Total Expenses		**XXXX**	**XXXX**	**XXXX**	**XX**
V. **Profit before Tax (III-IV)**		XXXX	XXXX	XXXX	XX
VI. **Less:** Income Tax		XXXX	XXXX	XXXX	XX
VII. **Profit after Tax (V - VI)**		**XXXX**	**XXXX**	**XXXX**	**XX**

Calculating Trend Percentages

Trend percentages are similar to horizontal analysis except that comparisons are made to a selected base year or period. Trend percentages are useful for comparing financial statements over several years because they disclose changes and trends occurring through time.

Trend percentages, also referred to as index numbers, help you to compare financial information over time to a base year or period. You can calculate trend percentages by:

- Selecting a base year or period.
- Assigning a weight of 100% to the amounts appearing on the base-year financial statements.
- Expressing the corresponding amounts on the other years' financial statements as a percentage of base-year or period amounts. Compute the percentages by **Analysis year amount / base year amount** and then multiplying the result by 100 to get a percentage.

RATIO AALYSIS

Ratios are mathematical expressions that represent the relationship between two or more numbers. They are used to compare different quantities or values and provide insight into various aspects of a situation. Ratios can be expressed in several ways, such as as fractions, decimals, or percentages.

OBJECTIVES or purposes for using ratios:

1. **Comparison**: Ratios allow for easy comparison between different quantities or values. By expressing relationships in terms of ratios, you can quickly see how one quantity relates to another.
2. **Analysis**: Ratios provide a method for analyzing data and making informed decisions. For example, financial ratios help investors and analysts evaluate the performance and health of a company.
3. **Prediction**: Ratios can sometimes be used to predict future trends or outcomes. By analyzing historical ratios and trends, you can make educated guesses about future performance.
4. **Standardization**: Ratios can help standardize measurements across different units or scales. This is especially useful when comparing data from different sources or contexts.
5. **Identification of Trends**: Ratios can highlight trends over time or across different groups. For instance, analyzing ratios of expenses to revenue over several years can reveal whether a company's cost management is improving or deteriorating.
6. **Decision-Making**: Ratios provide valuable information for decision-making processes. Whether it's in finance, manufacturing, or any other field, ratios help stakeholders make informed choices based on quantitative analysis.
7. **Performance Evaluation**: Ratios are often used to evaluate the performance of individuals, companies, projects, or processes. By comparing actual ratios to benchmarks or targets, you can assess performance and identify areas for improvement.

8. **Risk Assessment**: Ratios can be indicators of risk in various contexts. For example, financial ratios like the debt-to-equity ratio can signal potential financial instability or excessive leverage.
9. **Communication**: Ratios provide a concise way to communicate complex relationships or concepts. Whether it's in reports, presentations, or discussions, using ratios can make information more accessible and understandable to a wider audience.
10. **Goal Setting**: Ratios can help set realistic goals and benchmarks for improvement. By establishing target ratios based on industry standards or best practices, organizations can strive for continuous progress and excellence.

CLASSIFICATION OF RATIOS

Ratios can be classified into various types based on the nature of the quantities being compared and the purpose of the comparison. Here are some common classifications of ratios:

1. **Financial Ratios**: These ratios analyze the financial health, performance, and efficiency of a company. Examples include profitability ratios (e.g., return on investment, profit margin), liquidity ratios (e.g., current ratio, quick ratio), leverage ratios (e.g., debt-toequity ratio, interest coverage ratio), and efficiency ratios (e.g., inventory turnover, accounts receivable turnover).
2. **Activity Ratios**: Also known as efficiency ratios, these ratios measure how effectively a company utilizes its resources to generate revenue. Examples include inventory turnover ratio, asset turnover ratio, and accounts receivable turnover ratio.
3. **Liquidity Ratios**: These ratios assess a company's ability to meet its short-term obligations with its short-term assets. Common liquidity ratios include the current ratio and the quick ratio.
4. **Profitability Ratios**: Profitability ratios evaluate a company's ability to generate profits relative to its revenue, assets, or equity. Examples include gross profit margin, net profit margin, return on assets, and return on equity.
5. **Market Ratios**: These ratios evaluate a company's performance and value from the perspective of investors and the stock market. Examples include price-to-earnings ratio (P/E ratio), price-to-book ratio (P/B ratio), and dividend yield.
6. **Debt Ratios**: Also known as leverage ratios, these ratios measure the proportion of a company's assets financed by debt relative to its equity. Examples include debt-to-equity ratio, debt ratio, and interest coverage ratio.
7. **Coverage Ratios**: These ratios assess a company's ability to cover its financial obligations, such as interest payments, with its income or cash flow. Examples include interest coverage ratio and debt service coverage ratio.
8. **Efficiency Ratios**: Efficiency ratios measure how well a company utilizes its assets and resources to generate sales or income. Examples include inventory turnover ratio, accounts receivable turnover ratio, and asset turnover ratio.
9. **Composite Ratios**: These ratios combine multiple financial metrics into a single indicator, providing a comprehensive view of a company's financial performance. An example is the DuPont analysis, which breaks down return on equity into its components.

10. **Operational Ratios**: These ratios evaluate the operational efficiency and effectiveness of a company's core business activities. Examples include production efficiency ratios, capacity utilization ratios, and employee productivity ratios.

These classifications provide a framework for analyzing different aspects of a company's financial performance and operational effectiveness. Depending on the specific context and objectives, different ratios may be more relevant or informative.

UNIT IV

FUND FLOW ANALYSIS

In the context of fund flow analysis, "fund" refers to cash or cash equivalents, which are the financial resources available to an organization. Fund flow analysis is a technique used to analyze the movement of funds (cash) into and out of an organization over a specific period of time. It aims to track how funds are generated, used, and invested within the organization.

Fund flow analysis helps stakeholders understand the sources and uses of funds within an organization, identify trends in cash flow, assess liquidity, and make informed decisions about financial management and investment strategies. By examining the flow of funds between different activities, such as operating activities, investing activities, and financing activities, analysts can gain insights into the financial health and performance of the organization.

In fund flow analysis, funds typically refer to cash inflows and outflows from various sources and uses, including:

1. **Operating Activities**: Cash generated or used in the normal course of business, such as sales revenue, expenses, and changes in working capital.
2. **Investing Activities**: Cash flows related to the purchase or sale of long-term assets, such as property, plant, equipment, investments in securities, and acquisitions or divestitures of subsidiaries.
3. **Financing Activities**: Cash flows associated with raising capital or repaying debt, including proceeds from issuing stock or bonds, repayment of loans, dividends paid to shareholders, and other financing transactions.

By analyzing the movement of funds across these activities, fund flow analysis helps stakeholders understand how effectively an organization manages its financial resources, assess its liquidity and solvency, and identify potential areas for improvement or risk.

Importance:

1. **Insight into Financial Health**: Fund flow analysis provides insights into the overall financial health of an organization by tracking the movement of funds over time. It helps assess the organization's liquidity, solvency, and ability to meet its financial obligations.

2. **Identifying Cash Flow Trends**: By analyzing the sources and uses of funds, fund flow analysis helps identify trends in cash flow, such as fluctuations in revenue, changes in working capital, or shifts in investment activities. This information can be used to anticipate future cash flow needs and plan accordingly.
3. **Monitoring Capital Structure**: Fund flow analysis helps monitor changes in the organization's capital structure by tracking cash inflows and outflows from financing activities, such as issuing equity or debt, repaying loans, or paying dividends. This information is essential for maintaining an optimal capital structure and managing financial risk.
4. **Investment Decision Making**: Investors use fund flow analysis to evaluate the financial performance and prospects of companies before making investment decisions. By analyzing the sources and uses of funds, investors can assess the company's ability to generate cash flows, fund growth opportunities, and provide returns to shareholders.
5. **Budgeting and Planning**: Fund flow analysis aids in budgeting and financial planning by providing insights into the organization's cash flow patterns and future funding requirements. It helps allocate resources efficiently, prioritize investments, and develop strategies to achieve financial goals.

Limitations:

1. **Limited Focus**: Fund flow analysis focuses primarily on cash flows and may not provide a comprehensive picture of an organization's overall financial performance. It may overlook non-cash transactions, such as depreciation or changes in inventory valuation, which can impact profitability and financial health.
2. **Historical Data**: Fund flow analysis relies on historical data and may not capture realtime changes in the organization's financial position. It may be less useful for predicting future cash flows or responding to dynamic market conditions.
3. **Complexity**: Fund flow analysis can be complex and time-consuming, particularly for large organizations with diverse operations and sources of funding. It requires careful analysis of financial statements and transactions to accurately track the movement of funds.
4. **Manipulation**: Like any financial analysis tool, fund flow analysis is susceptible to manipulation or misinterpretation. Companies may use accounting techniques to manipulate cash flow figures or disguise financial weaknesses, making it challenging for stakeholders to assess the true financial health of the organization.
5. **External Factors**: Fund flow analysis may be influenced by external factors beyond the organization's control, such as changes in economic conditions, industry trends, or regulatory requirements. These factors can impact cash flows and distort the analysis of the organization's financial performance.

Format of a Statement of Changes in Working Capital

Particulars	Base Year ($)	Current Year ($)	Effect on Working Capital	
			Increase ($)	Decrease ($)
Current Assets				
Cash in hand	******	******	******	******
Cash at bank	******	******	******	******
Bills Receivable	******	******	******	******
Stock	******	******	******	******
Debtors	******	******	******	******
Shot term/Temporary/Marketable Investments	******	******	******	******
Prepaid Expenses	******	******	******	******
Accrued Income	******	******	******	******
Short-term Loans and Advances	******	******	******	******
Total Current Assets (A)	******	******		
Current Liabilities				
Sundry Creditors	******	******	******	******
Bills Payable	******	******	******	******
Provision for Taxation	******	******	******	******
Bank Overdraft	******	******	******	******
Short-term Loans or Deposits	******	******	******	******
Proposed Dividend	******	******	******	******
Total Current Liabilities (B)	******	******		
Working Capital (A) - (B)	******	******	******	******
Net Increase or Decrease in Working Capital	******	******	******	******
Total	******	******	******	******

FUND FLOW STATEMENT

A Funds Flow Statement is a financial document that analyses a company's Balance Sheet of two years to validate the movement of funds from the previous financial year to the current year. In other words, it compares the source of inflow and outflow of funds during the concerned accounting period and analyses how it affects the working capital of an organization.

It is an essential determiner that shows how funds are used. With the help of this statement, financial analysts can assess the fund flow of an organization in the near future. As this statement portrays the movement of funds among several sources and their applications, it is also known as the Application of the Funds and Statement of Sources.

Format/Specimen of Fund Flow

Statement

T-Format of Fund Flow Statement

Fund Flow Statement (Statement of Sources and Application of Funds) for the year ended on.....

Sources of Funds	$	Application of Funds	$
Issue of share capital (both equity and preference)	*****	Redemption of preference shares	*****
Issue of debentures	*****	Redemption of debentures	*****
Amount raised through long-term loans	*****	Repayment of loans	*****
Sale of fixed assets	*****	Purchase of fixed assets purchased for consideration (other than shares, debentures, or long-term debt)	*****
Sale of investment	*****	Purchase of long-term investments	*****
Non-trading income (e.g., income from investments, dividends, etc.)	*****	Payment of interim and final dividends in cash	*****
Fund from operations (trading profit)	*****	Non-trading expenses	*****
(A) Decrease in working capital (as per statement of changes in working capital)	*****	Funds lost in operations	*****
	*****	Payment of taxes	*****
	*****	(B) Increase in working capital (as per statement of changes in working capital)	*****
Total	*****	**Total**	*****

Note: Either (A) or (B) will appear in the T-format.

Vertical Format of Fund Flow Statement

Funds Flow Statement (Statement of Sources and Application of Funds) for the year ended on_____

Sources of Funds	$
Issue of share capital (both equity and preference)	*****
Issue of debentures	*****
Amount raised through long-term loans	*****
Sale of fixed assets	*****
Sale of investment	*****
Non-trading income (e.g., income from investments, dividends, etc.)	*****
Funds from operations (trading profit)	*****
(A) Decrease in net working capital (as per statement of changes in working capital)	*****
Total	*****
Application of funds	
Redemption of preference share capital	*****
Redemption of debentures	*****
Repayment of long-term loan	*****
Repayment of tax	*****
Repayment of dividends	*****
Purchase of fixed assets (other than for shares, debentures, or long-term debt)	*****
Purchase of investment	*****
(B) Net increase in working capital (as per statement of changes in working capital)	*****
Total	*****

UNIT -V

CASH FLOW ANALYSIS

Cash flow analysis is crucial for both individuals and businesses for several reasons:

1. **Liquidity Management**: It helps in understanding the inflow and outflow of cash, ensuring that there is enough cash available to meet short-term obligations.
2. **Financial Health**: It provides insights into the financial health of a business by showing whether it's generating enough cash to cover expenses and investments.
3. **Investment Decisions**: Investors use cash flow analysis to evaluate the potential of a business. Positive cash flow indicates the ability to reinvest in the business or distribute dividends.
4. **Budgeting and Planning**: It aids in budgeting and planning by providing a clearer picture of expected cash flows, helping businesses make informed decisions regarding spending and investments.
5. **Identifying Trends**: Analyzing cash flows over time can reveal trends, such as seasonal variations or changes in customer payment patterns, which can inform strategic planning.
6. **Debt Management**: It helps in managing debt by showing whether a business can comfortably meet its debt obligations and interest payments.
7. **Risk Assessment**: Cash flow analysis can identify potential risks such as cash flow shortages, allowing businesses to take proactive measures to mitigate them.

8. **Valuation**: Cash flow analysis is fundamental in valuation models like discounted cash flow (DCF), which estimates the present value of future cash flows to determine the intrinsic value of a business.
9. **Decision Making**: It provides the basis for decision-making, such as whether to expand operations, invest in new projects, or cut costs.

In summary, cash flow analysis is essential for maintaining financial stability, making informed decisions, and ensuring the long-term success of individuals and businesses.

DIFFERENCE BETWEEN FUND FLOW & CASH FLOW

Fund flow and cash flow are both important concepts in financial analysis, but they focus on different aspects of a business's financial operations. Here's a breakdown of the key differences between fund flow and cash flow:

1. **Nature of Analysis**:
   - **Fund Flow Analysis**: Fund flow analysis focuses on changes in a company's financial position over a specific period. It examines how funds move within a business, including sources and uses of funds, to determine the reasons for changes in financial position. ○ **Cash Flow Analysis**: Cash flow analysis, on the other hand, focuses specifically on the movement of cash into and out of a business over a particular period. It tracks cash inflows and outflows from operating, investing, and financing activities to assess the liquidity and financial health of the business.
2. **Components**:
   - **Fund Flow**: Fund flow analysis considers both cash and non-cash items, such as changes in working capital, long-term investments, and financing activities like issuing or repurchasing stock and bonds. ○ **Cash Flow**: Cash flow analysis primarily focuses on cash transactions, including cash receipts from sales, cash payments for expenses, investments in assets, and financing activities like borrowing or repaying loans.
3. **Purpose**:
   - **Fund Flow**: Fund flow analysis is more concerned with understanding the reasons behind changes in a company's financial position, such as identifying sources of financing, evaluating investment decisions, or assessing the company's ability to meet long-term obligations. ○ **Cash Flow**: Cash flow analysis is primarily concerned with assessing the liquidity and solvency of a business, determining its ability to generate cash to cover shortterm obligations, and evaluating its capacity for future investments and growth.
4. **Timing**:
   - **Fund Flow**: Fund flow analysis typically covers longer periods, such as quarterly or annual periods, to assess overall changes in a company's financial position.
   - **Cash Flow**: Cash flow analysis often focuses on shorter timeframes, such as monthly or quarterly periods, to monitor the day-to-day cash flows and ensure that the business has enough liquidity to meet its immediate needs.

In summary, while both fund flow and cash flow analysis are essential for understanding a company's financial performance and position, they approach the analysis from different perspectives and serve different purposes. Fund flow analysis examines changes in overall financial position, including both cash and non-cash items, while cash flow analysis focuses specifically on cash movements to assess liquidity and financial health.

Preparing a cash flow statement involves several steps and requires gathering information from a company's financial statements, primarily the income statement and balance sheet. Here's a general procedure for preparing a cash flow statement:

1. **Identify the Components**: Understand the three main components of cash flow: operating activities, investing activities, and financing activities.
2. **Gather Financial Statements**: Collect the necessary financial statements, including the income statement and balance sheet, for the period you're preparing the cash flow statement for.
3. **Adjust Net Income**: Start with the net income from the income statement. Adjust it by adding or subtracting non-cash items such as depreciation, amortization, and changes in working capital.
4. **Operating Activities**:
    - Identify cash inflows and outflows from operating activities. Cash inflows may include cash received from customers, interest received, and dividends received. Cash outflows may include payments to suppliers, employees, interest payments, and income taxes. ○ Make adjustments for changes in working capital items like accounts receivable, accounts payable, and inventory.
5. **Investing Activities**:
    - Identify cash inflows and outflows related to investing activities. Cash inflows may include proceeds from the sale of investments or fixed assets. Cash outflows may include payments for the purchase of investments or fixed assets. ○ Record any cash paid for acquisitions or received from divestitures.
6. **Financing Activities**:
    - Identify cash inflows and outflows related to financing activities. Cash inflows may include proceeds from issuing stocks or bonds, loans, or other borrowings. Cash outflows may include repayment of debt or dividends paid to shareholders. ○ Record any cash received from or paid to investors and creditors.
7. **Net Cash Flow**: Calculate the net cash flow for each category of activities (operating, investing, and financing) by summing up the cash inflows and outflows.
8. **Net Increase or Decrease in Cash**: Calculate the net increase or decrease in cash by adding the net cash flow from each category.
9. **Beginning and Ending Cash Balance**: Determine the beginning cash balance (from the balance sheet of the previous period) and calculate the ending cash balance by adding the net increase or decrease in cash to the beginning cash balance.
10. **Presentation**: Prepare the cash flow statement, showing the net cash flow from operating, investing, and financing activities, as well as the beginning and ending cash balances.

11. **Reconciliation**: Ensure that the ending cash balance on the cash flow statement matches the cash and cash equivalents balance on the balance sheet.
12. **Review and Analysis**: Review the prepared cash flow statement for accuracy and completeness. Analyze the cash flow patterns to assess the company's liquidity, solvency, and ability to generate cash.

By following these steps, you can accurately prepare a cash flow statement to provide valuable insights into a company's cash flows and financial performance.

Format of Cash Flow from Operating Activities

Cash Flow from Operating Activities

I. Net profit before taxation and extraordinary items*		XXXX
II. Adjustments related to Non-cash and Non-operating Items		
Add: Items to be added:		
Depreciation on Fixed Assets	XXXX	
Interest on Borrowings	XXXX	
Preliminary Expenses/Underwriting Commission/Discount on Issue of Debentures/Shares Written Off	XXXX	
Goodwill/Patents/Trade Marks/Copyright amortised	XXXX	
Loss on Sale of Machinery/Land and Building/Investments, etc.	XXXX	
Premium payable on redemption of Preference Shares/Debentures	XXXX	XXXX
Less: Items to be deducted:		
Interest Income/Other Income	XXXX	
Dividend Income	XXXX	
Discount on Redemption of Preference Shares/Debentures	XXXX	
Profit on Sale of Machinery/Land and Building/Investments, etc.	XXXX	(XXXX)
Operating Profit before Working Capital Changes		**XXXX**
III. Adjustments related to change in Current Assets and Current Liabilities		
Add: Decrease in Current Assets	XXXX	
Increase in Current Liabilities	XXXX	XXXX
Less: Increase in Current Assets	XXXX	
Decrease in Current Liabilities	XXXX	(XXXX)
Cash generated from Operations		**XXXX**
Less: Income taxes paid (Net of Refund)		(XXXX)
Cash before Extraordinary Items		**XXXX**
Less: Extraordinary Items		(XXXX)
Net Cash Inflow/Outflow from Operating Activities		**XXXX**

Format of Cash Flow from Investing Activities

Cash Flow from Investing Activities

Particulars	₹	₹
Proceeds from disposal of Fixed Assets:		
Proceeds from Sale of Machinery	XXXX	
Proceeds from Sale of Land and Building	XXXX	
Proceeds from Sale of Furniture and Fixtures	XXXX	
Proceeds from Sale of Investments	XXXX	
Proceeds from Sale of Goodwill, Patent Rights, Trade Marks, etc.	XXXX	
Add: Non-operating Incomes from Investments:		
Dividend from Shares	XXXX	
Interest received on Debentures	XXXX	
Rent on Property Received	XXXX	XXXX
Less: Purchase of Non-current Assets:		
Purchase of Machinery	XXXX	
Purchase of Land and Building	XXXX	
Purchase of Furniture and Fixtures	XXXX	
Purchase of Investments	XXXX	
Purchase of Goodwill, Patent Rights, Trade Marks, etc.	XXXX	(XXXX)
Net Cash Flow from Investing Activities Or Net Cash Used in Investing Activities		**XXXX Or XXXX**

3

Format of Cash Flow from Financing Activities

Cash Flow from Financing Activities

Particulars	Amount(₹)	Amount(₹)
Proceeds from Issue of Share Capital and Borrowings:		
Proceeds from Issue of Equity Shares	XXXX	
Proceeds from Issue of Preference Shares	XXXX	
Proceeds from Issue of Debentures, etc.	XXXX	XXXX
Less: Buy-Back of Equity Shares	XXXX	
Less: Redemption of Preference Shares	XXXX	
Less: Redemption of Debentures	XXXX	
Less: Interim Dividend on Equity Shares	XXXX	
Less: Final Dividend Paid on Equity Shares	XXXX	
Less: Dividend on Preference Shares	XXXX	
Less: Interest Paid on Debentures, etc.	XXXX	XXXX
Net Cash Flow from Financing Activities **Or** **Net Cash Used in Financing Activities**		**XXXX**

IMPORTANT QUESTIONS UNIT -

1

1. What is Management accounting . State its importance & limitations.
2. Marginal Costing Vs. Absorption costing
3. Discuss the various decisions under Marginal costing.
4. Break even analysis, CVP analysis, VED analysis

UNIT –II

1. Explain the concept of Budget & Budgetary control.
2. Discuss standard costing. State its Advantages & Limitations.
3. Standard Costing Vs. Historical Costing.
4. Material variances.

UNIT-III

1. What is Ratio Analysis? State its Advantages & Limitations.
2. Explain Trend Analysis.
3. What do you mean by Working capital?
4. Discuss Common size statements.
5. Explain Financial Statements

UNIT- IV

1. Explain the concept of Fund.
2. What do you mean by Statement of changes in Working Capital?
3. Explain About Fund flow statement.
4. Draw the proforma of Statement of changes in Working Capital.

UNIT –V

1. Discuss the differences between Fund flow & Cash flow.
2. Explain the Various activities in cash flow.
3. Operating activities
4. Investing activities
5. Operating activities
6. Financing activities