UNIT 1 . Introduction to Cost Accounting

Meaning:
Cost accounting is a branch of accounting that deals with recording, classifying, analyzing, and allocating costs associated with a process, product, or service. It helps businesses determine the cost of production and control expenses.

Objectives:

- Ascertain the cost of products and services.
- Help in cost control and cost reduction.
- Assist in decision-making related to pricing, budgeting, and profitability.
- Provide information for financial reporting and internal management.

Differences between Cost Accounting and Financial Accounting:

Feature	Cost Accounting	Financial Accounting
Purpose	Helps in cost control and decision-making	Provides financial position and performance
Users	Mainly for internal management	Used by external stakeholders (investors, government, etc.)
Mandatory	Not legally required	Legally required for businesses
Reports	Detailed cost reports	General financial statements

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2. Classification of Cost

Costs are classified based on different factors:

- **By Nature**: Direct Costs (e.g., raw materials, labor) & Indirect Costs (e.g., rent, utilities).
- **By Behavior**: Fixed Costs (do not change with production), Variable Costs (change with production), and Semi-Variable Costs.
- **By Function**: Production, Administration, Selling & Distribution costs.
- **By Controllability**: Controllable and Uncontrollable Costs.

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3. Preparation of Cost Sheet

A cost sheet is a detailed statement showing the total cost incurred in production. It typically includes:

1. **Prime Cost** (Direct Materials + Direct Labor + Direct Expenses)
2. **Factory/Work Cost** (Prime Cost + Factory Overheads)

3. **Total Cost of Production** (Factory Cost + Administrative Overheads)
4. **Cost of Sales** (Total Cost + Selling & Distribution Overheads)

Format of a Cost Sheet:

A typical cost sheet includes the following sections:

Prime Cost:

Direct costs directly linked to the production of goods.

- **Direct Material Cost:** Raw materials consumed in production.
- **Direct Labor/ Wages:** Payments to workers directly involved in production.
- **Direct Expenses:** Other direct expenses (e.g., machine hire charges).

1-Prime Cost Formula:

Prime Cost=Direct Material+Direct Labor+Direct Expenses\text{Prime Cost} = \text{Direct Material} + \text{Direct Labor} + \text{Direct Expenses}Prime Cost=Direct Material+Direct Labor+Direct Expenses

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2 -Factory/Works Cost:

Includes all costs related to factory operations.

- **Prime Cost** (from above)
- **+ Factory Overheads:** Indirect costs like power, rent, maintenance, etc.
- **+ Depreciation on Factory Machinery**

Factory Cost Formula:

Factory Cost=Prime Cost+Factory Overheads\text{Factory Cost} = \text{Prime Cost} + \text{Factory Overheads}Factory Cost=Prime Cost+Factory Overheads

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3- Cost of Production:

Adds administrative overheads to the factory cost.

- **Factory Cost**
- **+ Office & Administrative Overheads**

Cost of Production Formula:

Cost of Production=Factory Cost+Administrative Overheads\text{Cost of Production} = \text{Factory Cost} + \text{Administrative Overheads}Cost of Production=Factory Cost+Administrative Overheads

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4- Total Cost/Cost of Sales:

Includes selling and distribution expenses.

- **Cost of Production**
- **+ Selling & Distribution Overheads**

Total Cost Formula:

\text{Total Cost} = \text{Cost of Production} + \text{Selling & Distribution Overheads}

5- Profit or Loss:

If a selling price is given, the profit/loss can be determined.

5. Profit/Loss=Selling Price−Total Cost\text{Profit/Loss} = \text{Selling Price} - \text{Total Cost}Profit/Loss=Selling Price−Total Cost

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4. Difference Between Marginal and Absorption Costing

Basis	Marginal Costing	Absorption Costing
Cost Treatment	Only variable costs are considered for product costing	Both fixed and variable costs are considered
Fixed Costs	Treated as period cost (not assigned to units)	Distributed over all units produced
Profit Calculation	Changes with the number of units sold	Changes with the number of units produced
Usefulness	Useful for short-term decision-making	Better for long-term pricing and profitability analysis

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5. Cost-Volume-Profit (CVP) Analysis

CVP analysis helps businesses understand how cost, sales volume, and profit interact. It includes:

- **Break-even Analysis:** The point at which total revenue equals total cost (no profit, no loss).
- **Contribution Margin:** Selling price per unit minus variable cost per uniH1Ut.
- **Profit Planning:** Helps in setting sales targets to achieve desired profits.

The Cost-Volume-Profit (CVP) Analysis **formula helps businesses determine how changes in costs and sales volume affect profit. The key formula is**

Profit = Sales - Variable Costs - Fixed Costs

Break-Even Point (Units) = Fixed Costs / (Selling Price per Unit - Variable Cost per Unit)

Break-Even Point (Sales) = Fixed Costs / Contribution Margin Ratio

Contribution Margin Ratio (CMR) = (Selling Price per Unit - Variable Cost per Unit) / Selling Price per Unit

Target Profit (Units) = (Fixed Costs + Target Profit) / (Selling Price per Unit - Variable Cost per Unit)

Margin of Safety (%) = (Actual Sales - Break-Even Sales) / Actual Sales * 100

UNIT 2 Methods of Costing

Costing methods help businesses determine the cost of products or services based on the nature of production. The three key methods are **Job Costing, Process Costing, and Activity-Based Costing (ABC).**

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1. Job Costing

Definition:
Job costing is a costing method where costs are assigned to specific jobs, projects, or batches. It is used when products are customized, and each job has unique specifications.

Examples:

- Construction projects
- Custom furniture manufacturing
- Printing and publishing

Features:

- Each job is treated as a separate unit.
- Costs are accumulated for each job separately.
- Suitable for industries with varied production.

Formula:

Total Job Cost=Direct Materials+Direct Labor+Overheads\text{Total Job Cost} = \text{Direct Materials} + \text{Direct Labor} + \text{Overheads}Total Job Cost=Direct Materials+Direct Labor+Overheads

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2. Process Costing

Definition:
Process costing is used when identical products are manufactured in large quantities through a continuous production process. The cost is averaged over all units produced.

Examples:

- Oil refineries
- Textile industries
- Cement manufacturing

Features:

- Costs are accumulated for each process or department.
- Suitable for mass production industries.
- Uses cost per unit to determine production costs.

Formula:

Cost per Unit=Total Process CostTotal Units Produced\text{Cost per Unit} = \frac{\text{Total Process Cost}}{\text{Total Units Produced}}Cost per Unit=Total Units ProducedTotal Process Cost

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3. Activity-Based Costing (ABC)

Definition:
Activity-Based Costing is a modern method that assigns costs based on activities that drive overhead costs, rather than simply using labor hours or machine hours.

Examples:

- Customer support services
- IT service companies
- Product-based businesses with diverse product lines

Steps in ABC Costing:

1. Identify activities that consume resources.
2. Assign costs to activities (cost pools).
3. Allocate activity costs to products based on cost drivers (e.g., machine hours, number of orders).

Formula:

Activity Rate=Total Cost of ActivityTotal Activity Driver Units\text{Activity Rate} = \frac{\text{Total Cost of Activity}}{\text{Total Activity Driver Units}}Activity Rate=Total Activity Driver UnitsTotal Cost of Activity

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4. Reconciliation of Costing and Financial Records

Definition:
Reconciliation ensures that the cost accounting records match the financial accounting records. Since cost accounts focus on internal management, and financial accounts follow legal regulations, differences arise that need to be adjusted.

Reasons for Differences:

- **Overheads treatment:** Costing may use estimated overheads, while financial accounts use actual overheads.
- **Stock valuation:** Costing values stock based on cost, while financial accounts may use FIFO, LIFO, or Weighted Average methods.
- **Depreciation method differences:** Cost accounting may use one method (e.g., straight-line), while financial accounts may use another (e.g., reducing balance).

Reconciliation of Costing and Financial Records

1. Statement of Reconciliation for [Month/Year]

Particulars	Amount (₹)
Profit as per Cost Accounts	XXXX
Add: Items not included in Cost Accounts but included in Financial Accounts:	
- Interest on Capital	XXXX
- Rent, Rates, and Taxes	XXXX
- Loss on Sale of Assets	XXXX
- Depreciation (Financial Accounts)	XXXX
- Other Financial Expenses	XXXX
Less: Items included in Cost Accounts but not in Financial Accounts:	
- Notional Rent	(XXXX)
- Interest on Own Funds	(XXXX)

Particulars	Amount (₹)
- Depreciation (Cost Accounts)	(XXXX)
- Over/Under Absorption of Overheads	(XXXX)
Add: Overvaluation of Closing Stock in Cost Accounts	XXXX
Less: Undervaluation of Closing Stock in Cost Accounts	(XXXX)
Adjusted Profit as per Financial Accounts	XXXX

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2. Reasons for Differences

Non-Cash Items: Certain expenses such as notional rent or interest on capital are included in one account but excluded from the other.

✅ **Depreciation Methods:** Different methods used in cost and financial accounts (Straight Line vs. WDV method).

✅ **Stock Valuation:** Stock values may be different due to varying valuation methods (FIFO, LIFO, Weighted Average).

✅ **Absorption of Overheads:** Over/under absorption of overheads may lead to variations.

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3. Notes:

- Proper documentation should be maintained for any discrepancies.
- Periodic reconciliation is essential to ensure accurate financial and cost records.

Costing methods help businesses determine the cost of products or services based on the nature of production. The three key methods are **Job Costing, Process Costing, and Activity-Based Costing (ABC).**

UNIT 3 1. Introduction to Management Accounting

Meaning:

Management accounting involves the preparation of financial and non-financial data to help managers in decision-making, planning, and controlling business operations. Management accounting, also known as managerial accounting, involves the process of identifying, measuring, analyzing, and interpreting financial information to help managers make informed

business decisions. Unlike financial accounting, which focuses on external reporting, management accounting is primarily used for internal purposes.

Objectives of Management Accounting:

1. **Decision-Making Support:** Provides relevant data to managers to make strategic and operational decisions.
2. **Budgeting and Forecasting:** Helps in preparing budgets and predicting future financial outcomes.
3. **Performance Evaluation:** Assists in evaluating the performance of departments, products, and employees.
4. **Cost Control and Reduction:** Identifies areas where costs can be reduced without affecting quality.
5. **Improved Efficiency:** Enhances efficiency by analyzing processes and suggesting improvements.

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Difference Between Cost Accounting & Management Accounting:

Basis	Cost Accounting	Management Accounting
Purpose	Focuses on cost control & reduction	Focuses on decision-making & planning
Data Used	Historical cost data	Both historical & future-oriented data
Mandatory	Not legally required	Not legally required but useful for internal management
Reports	Detailed cost reports	Summarized management reports

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2. Relevant Costing & Decision Making

Relevant costing focuses on identifying costs that are relevant to a specific business decision.

Key Decisions in Relevant Costing:

a) Special Order Decisions

- Determines whether to accept a one-time special order at a lower price.
- Considers variable costs and ignores fixed costs (if they won’t change).

b) Addition or Deletion of Products & Services

- Evaluates whether to introduce a new product/service or discontinue an existing one.
- Compares relevant revenues and avoidable costs.

c) Optimal Use of Limited Resources

- Allocates scarce resources (e.g., labor, materials, machine hours) to maximize profit.
- Uses **Contribution Margin per Unit of Limiting Factor** for decision-making.

d) Pricing Decisions

- Determines the best pricing strategy considering cost, demand, and competition.
- Methods include **Cost-Plus Pricing, Competitive Pricing, and Target Costing**.

e) Make or Buy Decisions

- Analyzes whether to manufacture a component in-house or outsource it.
- Compares **cost of making** (direct materials, labor, overheads) with **cost of buying** (purchase price, supplier terms).

UNIT 4

1. Budgets and Budgetary Control

Definition:
A budget is a financial plan that estimates income and expenses for a specific period. Budgetary control is the process of comparing actual performance with budgeted figures and taking corrective actions .

Types of Budgets:

- **Fixed Budget:** Remains unchanged regardless of actual production levels.
- **Flexible Budget:** Adjusts based on changes in production or sales volume.

Steps in Budgetary Control:

1. Set budget goals.
2. Compare actual vs. budgeted performance.
3. Analyze variances and take corrective actions.

Objectives of Budgeting

- **Resource Allocation:** Ensures optimal use of resources.
- **Coordination:** Aligns departmental goals with overall organizational objectives.
- **Control and Monitoring:** Provides a benchmark for comparing actual performance.
- **Cost Reduction:** Identifies areas to minimize unnecessary spending.
- **Decision-Making:** Aids in evaluating financial implications of decisions.

Fixed Budget (Static Budget)

A fixed budget remains constant regardless of changes in business activity or production levels. It's based on predicted revenue and expenses over a specific period (usually annually).

☑ **Key Characteristics:**

- Doesn't adjust for variations in sales or production.

- Suitable for stable environments with minimal changes.
- Easier to prepare and monitor.

Pros:

- Simple to manage and track.
- Provides a clear financial roadmap.

Cons:

- Becomes inaccurate if business conditions change.
- Can lead to inefficiencies if actual performance deviates significantly from projections.

Example:
A company sets a fixed budget of $100,000 for marketing for the year. Even if sales increase or decrease, the marketing budget remains unchanged.

Flexible Budget (Variable Budget)

A flexible budget adjusts based on changes in business activity, such as sales volume or production levels. It is more dynamic and provides a realistic view of expenses.

Key Characteristics:

- Adapts to fluctuations in operational conditions.
- Suitable for industries with variable costs and unpredictable demand.
- Helps analyze performance more accurately.

Pros:

- Provides a more realistic view of actual costs.
- Identifies variances and helps control costs effectively.

Cons:

- More complex to develop and monitor.
- Requires constant updating and analysis.

Example:
A company allocates 5% of its revenue to marketing. If revenue increases, the marketing budget grows; if revenue decreases, the budget shrinks accordingly.

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2. Standard Costing and Variance Analysis

Standard Costing:

- Predetermined cost estimates for materials, labor, and overheads.
- Helps in setting cost control measures.

Variance Analysis:

- Compares actual costs with standard costs to find deviations (variances).
- **Material Variance:** Difference between standard and actual material costs.
- **Labor Variance:** Difference between standard and actual labor costs.

The **Material Variance** analyzes the difference between the standard cost and the actual cost of materials used in production.

1. **Material Cost Variance : Material Cost Variance=Standard Cost−Actual Cost**
2. Material Price Variance (MPV):
   Material Price Variance=Actual Quantity×(Standard Price−Actual Price)
3. Material Usage/Quantity Variance (MUV) :
   Material Usage Variance=Standard Price×(Standard Quantity−Actual Quantity)
4. Material Mix Variance (MMV):
   Material Mix Variance=Standard Cost of Actual Mix−Standard Cost of Standard Mix
5. **Material Yield Variance (MYV):**
   Material Yield Variance=(Actual Yield−Standard Yield)×Standard Cost per Unit

Labour variance is used to analyze the difference between the actual labor costs and the standard (budgeted) labor costs. The key labor variance formulas are:

1. **Labour Cost Variance (LCV):**
   Labour Cost Variance=(Actual Hours×Actual Rate)−(Standard Hours×Standard Rate)
2. **Labour Rate Variance (LRV):** =Actual Hours×(Actual Rate−Standard Rate)
3. Labour Efficiency Variance=Standard Rate×(Standard Hours−Actual Hours)
4. Idle Time Variance=Idle Hours×Standard Rate
5. Labour Mix Variance=Standard Cost of Actual Time at Standard Mix−Standard Cost of Actual Time at Actual Mix

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3. Responsibility Accounting

Meaning:
Responsibility accounting assigns accountability to managers for controlling costs and performance within their departments.

Types of Responsibility Centers:

1. **Cost Center:** Responsible for cost control (e.g., production department).
2. **Revenue Center:** Responsible for revenue generation (e.g., sales department).
3. **Profit Center:** Responsible for both revenues and costs (e.g., branch office).
4. **Investment Center:** Responsible for costs, revenues, and investment decisions (e.g., a subsidiary).