

Maulana Abul Kalam Azad University of Technology, West Bengal

(Formerly known as West Bengal University of Technology)

Syllabus of Bachelor of Business Administration

Effective from academic session 2023-2024

Semester-VII

Management Accounting

Paper Code: BBACO701

Total Credit: 5

Total hours of lectures: 75 hours

Course Outcomes:

CO1: Understand the concept, nature, scope, and functions of Management Accounting, and distinguish it from Financial Accounting to appreciate its role in managerial decision-making.

CO2: Develop the ability to analyze financial statements through the preparation and interpretation of Fund Flow, Cash Flow (AS 3), Comparative, and Common Size Statements for assessing business performance and financial health.

CO3: Compute, interpret, and evaluate key accounting ratios such as profitability, liquidity, and turnover ratios to facilitate performance appraisal and informed decision-making.

CO4: Apply Marginal Costing and Break-even Analysis techniques to assess cost-volume-profit relationships and make strategic decisions such as make-or-buy, product mix alteration, and shutdown options.

CO5: Formulate and analyze different types of budgets (Fixed, Flexible, Cash, and Zero-Based) to support effective profit planning, cost control, and resource allocation within organizations.

CO6: Integrate various management accounting tools to support managerial planning, control, and decision-making, enhancing overall organizational efficiency and profitability.

Module I: Management Accounting Meaning, nature, scope and functions of management accounting; Management Accounting vs Financial Accounting.	(9L)
Module II: Financial Statement Analysis Fund flow statement, Cash flow statement (AS3), Comparative statement, Common size statement.	(18L)
Module III: Ratio analysis Computation and implications -Profitability ratios, turnover ratios, liquidity ratios, turnover ratios; Advantages and limitations of accounting ratios.	(15L)
Module IV: Break Even analysis & Marginal Costing Break even analysis, Marginal Costing margin of safety, Marginal costing as a tool for decision making – make or buy; Change of product mix; shut down decision.	(15L)
Module V: Budgeting for Profit Planning and Control Meaning of budget and budgetary control; Objectives; Merits and limitations; Types of budgets; Fixed and Flexible budgeting, cash budget; Zero base budgeting. Numerical on Flexible and Cash Budget.	(18L)

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Suggested Readings:

1. Khan M.Y. and Jain P.K.: Management Accounting, TMH.
2. Kaplan R.S. and Aktinson. A.A.: Advanced Management Accounting, Prentice Hall of India.
3. Arora M.N.: Cost Accounting Principles and Practices; Vikas Publishing House.
4. Jain S.P. & Narang K.L.: Cost Accounting; Kalyani, New Delhi.
5. Bhabatosh Banerjee: Financial Policy & Management Accounting, Prentice Hall of India Ltd.

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Paper Name: Business Intelligence

Paper Code: BBACO702

Total Credit: 5

Total hours of lectures: 75 hours

Course outcomes

After this course the student will be able to:

1. CO1 (Understand) — Define BI concepts, workflows and the BI value chain.
2. CO2 (Apply) — Extract, transform and load sample datasets using SQL / Excel and perform basic cleaning.
3. CO3 (Apply/Analyze) — Design a simple star schema and explain its use for reporting.
4. CO4 (Apply) — Build an interactive dashboard showing KPIs (Power BI/Tableau) and present managerial insights.
5. CO5 (Analyze/Evaluate) — Interpret analytics output and make recommendations for business decisions.
6. CO6 (Evaluate) — Assess BI governance, privacy and ethical trade-offs in real-world cases.

Sl.	Topic / Module	Hours
1.	Introduction to BI & Decision Support: BI definitions, evolution, BI vs Analytics, types of analytics (descriptive / diagnostic / predictive / prescriptive), BI architecture overview, business drivers for BI.	6
2.	Information value chain & BI ecosystem: Data, information & knowledge; source systems, operational OLTP, OLAP, reporting needs; stakeholders and roles (analyst, BI developer, data steward).	6
3.	Data types, data quality & governance: Structured, semi/unstructured data, data quality dimensions, master data, metadata, data governance fundamentals, privacy/ethics/regulatory considerations.	6

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4.	Data warehousing fundamentals: DW concepts, OLAP vs OLTP, architecture options, staging area, metadata repository, benefits & limitations; Kimball vs Inmon approaches.	6
5.	Dimensional modeling & schema design: Star & snowflake schemas, fact & dimension tables, slowly changing dimensions, conformed dimensions, grain.	6
6.	ETL / Data integration: ETL process, data cleaning/transformations, sampling, handling missing values, incremental loads, basic pipelines	6
7.	Working with business data: Basic concepts of SQL SELECT / JOIN / aggregation; Excel Power Query, PivotTables; Connecting to dataset, create measures, calculated columns, basic visuals, filters & slicers; Advanced visuals, interactivity, parameters, publishing dashboards, performance considerations	9
8.	Reporting & dashboards – principles of good visualisation: Dashboarding best practices, KPIs, storytelling with data, cognitive load, chart selection, layout & interaction	6
9.	Descriptive & diagnostic analytics: Aggregation, time series summaries, variance analysis, root-cause analyses; drill-down/drill-through in dashboards.	6
10.	Intro to predictive ideas for BI: Overview of forecasting, segmentation / clustering, basic regression intuition, role of predictive models in BI	6
11.	BI project lifecycle & implementation challenges: Project scoping, stakeholder alignment, ROI for BI projects, change management, scaling BI.	6
12.	Ethics, privacy, and legal aspects; BI governance: GDPR-like concepts, anonymization, ethical use of algorithms, bias in BI outputs, data stewardship; case discussion.	6

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Recommended reference books & materials:

- R. Sharda, D. Delen & E. Turban, *Business Intelligence, Analytics, and Data Science: Systems for Decision Support* (10th ed. / or latest). (Pearson).
- Foster Provost & Tom Fawcett, *Data Science for Business* — for data-analytic thinking and business applications. O'Reilly Media
- Ralph Kimball & Margy Ross, *The Data Warehouse Toolkit: The Definitive Guide to Dimensional Modeling* — for dimensional modeling and DW design. Kimball Group
- Cole Nussbaumer Knaflitz, *Storytelling with Data* — for visualization & communication.
- Practical guides: *Power BI Cookbook* (or current Power BI / Tableau manuals & online documentation).
- Selected HBR articles & HBS cases (Davenport “Competing on Analytics”, Netflix case) for class discussion. Harvard Business Review

Recommended Software & data: Power BI Desktop (free), Tableau Public (free), Excel (pivot & Power Query), SQLite / MySQL or any available SQL engine, Python (pandas) optional. Use public datasets / sample business datasets.