

**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 III

**Operations Management**

**Paper Code: BBACO 301**

**Total Credits: 50**

**Course Outcomes:** After Completion of this course, the students will be able to

1. Identify the elements of operations management and various transformation processes to enhance productivity and competitiveness.
2. Analyze and evaluate various manufacturing systems, location and layout concepts.
3. Develop a balanced line of production & scheduling and sequencing techniques in operation environments.
4. Apply the concept of Maintenance management and purchase management vendor selection, negotiation, and inventory classification methods like EOQ, JIT, and ABC.

Sl. No.	Topic/ Module	Hours
1.	<b>Module 1: Introduction to Operations Management:</b> Definition and importance of Operations Management, Role of operations manager, Operations strategy and competitiveness, Historical development of Operations Management, Overview of production system, Production Planning, MRP I, II, ERP. Role of technology in operations management, Automation and robotics in operations	<b>06</b>
2.	<b>Module 2: Characteristics of Manufacturing Systems:</b> Classification of Manufacturing Systems	<b>03</b>
3.	<b>Module 3: Facility Location and Plant Layout:</b> Factors affecting facility location decisions, Methods for evaluating location alternatives, Types of layouts, Layout planning and analysis, Material handling systems, Need for a Good Plant Layout; Characteristics of a Good Layout, Costs associated with Plant Layout; Process Layout vs. Product Layout	<b>08</b>
4.	<b>Module 4: Assembly Line Balancing:</b> Concept and Problems; Cellular Manufacturing Concept	<b>05</b>
5.	<b>Module 5: Maintenance Management:</b> Types of Maintenance - Breakdown and Preventive Maintenance; Total Productive Maintenance (TPM), Concept of MTBF (Mean time between failure), MTTR, MTTF	<b>03</b>
6.	<b>Module 6: Purchase Management:</b> Purchasing Procedure; Value Analysis; Vendor Selection; Negotiation; Make or Buy decision, overview on Tender & Auction. Variety Reduction, stores Management	<b>06</b>

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7.	<b>Module 7: Inventory Management:</b> Importance and Types of Inventory, Inventory Control Systems, Economic Order Quantity (EOQ) Model, Classification- ABC, VED, FSN, Just-In-Time (JIT) Inventory, Inventory Optimization Technique.	<b>08</b>
8 .	<b>Module 8:</b> Purpose of Inspection & Quality control, Difference between QC & QA, Total quality Management(TQM), 7 QC tools, Overview on Statistical process control (SPC)& Statistical Quality Control(SQC)- Control Charts & acceptance Sampling, Sampling Plan "OC curve, AQL, AOQL & LTPD, "introduction to six sigma, Kaizen.	<b>08</b>
9.	<b>Module 09: Emerging Trends in Operations Management:</b> Impact of Technology and Innovation, Sustainability and Green Operations, Globalization and its Effect on Operations, Future Directions in Operations Management	<b>03</b>

**Suggested Readings:**

1. **Operations Management** – William J. Stevenson
2. **Production and Operations Management** – S. N. Chary
3. **Quality Management Demystified** – Sid Kemp
4. **Lean Six Sigma** – Michael L. George
5. **Operations Management for Competitive Advantage** – Richard B. Chase, F. Robert Jacobs, & Nicholas J. Aquilano
6. **Service Operations Management: Improving Service Delivery** – Robert Johnston & Graham Clark
7. **Inventory Management Explained: A Focus on Forecasting, Lot Sizing, Safety Stock, and Ordering Systems** – Graham Clark
8. **The Goal: A Process of Ongoing Improvement** – Eliyahu M. Goldratt
9. **Modern Production** – Buffa, E. S. and Sarin, R. K.
10. **Operations Management** – John Wiley
11. **Principles of Management** – Premvir Kapoor

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Paper Name: Financial Management and Risk Analysis

Paper Code: BBACO302

Total Credit: 5

Total hours of lectures: 50 hours

**Course Outcome:**

After completion of the course, the students will be able to

1. interpret the conceptual framework on Finance Functions and objectives
2. demonstrate corporate final accounts and cash flow statements in the business growth model
3. utilize financing and investment decisions considering discounting and non-discounting factors
4. examine the importance of working capital management and risk capital management.

Sl.	Topic/Module	Hours
1.	<b>Module 1</b> <b>Introduction, Analysis and Interpretation of Corporate Final Accounts:</b> Concepts, Nature, Scope, Function and Objectives of Financial Management, Time Value of Money, Risk and Return. Preparation of Cash Flow Statement as per Accounting Standard and its Analysis	10
2.	<b>Module 2</b> <b>Financing Decision:</b> Capital structure, cost of capital and valuation Designing capital structure <b>Leverage Analysis:</b> Developing the Concept of Leverage in Finance. Computation and inferences of Degree of Operating Leverage, Financial Leverage and Combined Leverage	10
3.	<b>Module 3</b> <b>Investment Decisions:</b> Analysis of Risk and Uncertainty. Concept and Computation of Time Value of Money, DCF and Non DCF methods of	10

	Investment Appraisal. Project selection on the basis of Investment Decisions Valuating Investment Proposals for Decision Making. Capital Rationing	
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4.	<b>Module 4</b> <b>Management of Working Capital:</b> Concepts, components, Determinants and need of Working Capital. Computation of Working Capital for a Company.	10
5.	<b>Module 5</b> <b>Risk Management:</b> Option valuation, Derivatives: Managing financial Risk	10

**Suggested Readings:**

1. Khan, M. Y., & Jain, P. K. *Financial Management: Text, Problems and Cases*. McGraw-Hill Education.
2. IM Pandey. *Financial Management*- By Pearson
3. Chandra, P. *Financial management*. Tata McGraw-Hill Education.
4. Bhalla, V. K. *Financial management*. S. Chand Publishing.
5. Banerjee, B. *Fundamentals of financial management*. PHI Learning Pvt. Ltd..
6. Brigham, E. F., & Ehrhardt, M. C. (2019). *Financial management: Theory & practice*. Cengage Learning.