Program: B.Com (Honours)	Semester : III	
Course: Operations Management	Code:	
Academic Year: 2024-2025		
Batch: 2023-2026		

	Teachin	g Scheme		Evaluatio	on Scheme
Lectures	Practicals	Tutorials	Credits	Internal Continuous Assessment (ICA) (weightage)	Term End Examinations (TEE) (weightage)
60	Nil	Nil	04	40 Marks	60 Marks

Internal Component

Class Test (Duration 20 Mins)	Projects / Assignments	Class Participation
20 Marks	20 Marks	-

Learning Objectives:

- To comprehend the basics of Operations Management and various sustainable practices in Operations Management.
- **2.** To evaluate manufacturing and service processes, including their determinants, types, design factors, strategic choices, and product development stages.
- **3.** To analyse inventory management, supply chain management, scheduling operations, and the theory of constraints
- **4.** To identify quality management dimensions, cost, SERVQUAL model, TQM principles/tools, Lean Management, and global strategic practices.

Learning Outcomes: After completion of the course, students would be able to:

- 1. The learner will be able to apply theory to tackle operational challenges, focusing on sustainable practices.
- 2. The learner will be able to analyse and design manufacturing and service processes, considering various determinants and factors, to optimize operations and product development.
- **3.** The learner will be able to apply inventory management principles, analyse supply chain structures, optimize scheduling operations, and identify constraints to improve overall operational efficiency.
- **4.** The learner will be able to acquire the skills in managing quality, implementing TQM and Lean principles and employing global strategies for enhanced operational efficiency.

Course Description:

Operations Management provides a comprehensive understanding of key practices essential for effective management of operations in both manufacturing and service industries. Students will explore topics such as inventory management, supply chain management, scheduling operations, managing quality, and strategic practices. Through the study of various tools and frameworks including Total Quality Management (TQM), Lean Management, and Global Strategic Practices, students will develop the skills necessary to optimize operations, enhance productivity, and achieve sustainable success in today's competitive business environment.

Pedagogy:

- 1. Techniques such as reviews, analysis of cases to promote critical thinking & to create motivated and independent learners.
- **2.** Group activities such as role plays, games, group assignments to enable learners to work together in a social environment and learn through sharing of individual information & experience.
- 3. Discussion of real scenarios from business & inquiry based approach for active learning.
- **4.** Flipped Classroom approach to enhance learner engagement.

Detailed Syllabus: (per session plan)

Session Outline For: Operations Management

Each lecture session would be of one hour duration (60 sessions)

Module	Module Content	Module Wise Duration (hrs)
	Introduction to Operations Management	
I	 1.1 Operations Management- Operations Management: Introduction, Difference between Production & Operations, Production of goods versus providing services. Scope, Significance and Challenges in Operations Management 1.2 Productivity: Concept, Productivity Variables- Labour, Capital & Management, Computing Productivity- Partial Measures Multi-Factor Measures. Productivity in the Service Sector. 1.3 Sustainability in Operations Management: Notion of Sustainability, Framework for sustainable Operations Management Reverse logistics. Remanufacturing. Challenges in creating sustainable operations 	15

	Designing Operations	
II	 1.1 Designing of Manufacturing Processes: Determinants of process characteristics in operations. Types of Processes & Operations Systems-Continuous, Intermittent, Jumbled Flow systems. 1.2 Design of Service Systems- Factors influencing choice of Design elements in Service system – Degree of Customer contact. Degree of Complexity & Divergence in Service systems. 1.3 Strategic choice- Service positioning, Service Blueprinting. Product Development Process- Stages in Product Development Process 	15
	Inventory and Supply Chain Management	
III	 1.1 Inventory Management: Types of Inventories, Requirements for Effective Inventory. 1.2 Supply Chain Management: Meaning, Information & Material Flow, Components – Inbound, In-house & Outbound Supply Chain, Supply Chain Structure and Bullwhip Effect 1.3 Scheduling Operations: Concept - High Volume, Intermediate Volume and Low Volume System A. Loading: Gantt Chart, Assignment Method of Linear Programming and Input/output B. Sequencing: First come, first serve (FCFS), shortest processing time (SPT), Earliest Due Date (EDD), Critical Ratio, Slack per operation, Rush, Theory of Constraints 	15
	Managing Quality	
IV	 1.1 Introduction to Quality Management: Dimensions of Quality, Cost of Quality, SERVQUAL Model & Its Significance in Operations. 1.2 Total Quality Management: Concept, TQM Tools – Kaizen (PDCA), Six Sigma, Benchmarking, Taguchi Concept 1.3 Lean Management: Philosophy of Lean Management, Creating a Lean Enterprise, Lean & The Toyota Production System, Lean in Services, Global Strategic Practices - JIT, TQM, TPM, Employee Involvement and Simplicity 	15

Reference Books:

- 1. Operations Management B. Mahadevan Pearson 3e (2015)
- 2. Operations Management William Stevenson McGraw Hill 13e (2022)
- 3. Operations Management (Sustainability and Supply Chain Management) Jay Heizer, Barry Render, Chuck Munson Pearson 12e (2017)

Details of Continuous Assessment (ICA)- 40 Marks

Continuous Assessment	Details	Marks
Component 1 (ICA-1)	Internal class test (online or offline) MCQs/Explain the concepts/Answer in brief/Case study or application-based questions.	20 marks
Component 2 (ICA-2)	Presentations/Project Work/ Viva- Voce/ Book Review/ Field visit & its presentations/ Documentary filming/ Assignments/ Group Discussions Etc.	20 marks

Details of Semester End Examination (TEE)- 60 Marks

Q. No.	Particulars	Marks
Q.1.	Attempt any two out of three (Module 1)	12
Q.2.	Attempt any two out of three (Module 2)	12
Q.3.	Attempt any two out of three (Module 3)	12
Q.4.	Attempt any two out of three (Module 4)	12
Q.5.	Case study/application-based questions	12