

GANPAT UNIVERSITY									
FACULTY OF MANAGEMENT STUDIES									
Programme	Bachelor of Business Administration				Branch/Spec.	General			
Semester	V				Version	1.0.0.0			
Effective from Academic Year		2026-27			Effective for the Batch admitted in			July 2024	
Course Code	BGEN303	Course Name			Production and Operation Management				
Teaching Scheme					Examination Scheme (Marks)				
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	04	00	00	00	04	Theory	50	50	100
Hours	04	00	00	00	04	Practical	00	00	000
Pre-requisites									
Knowledge of planning, organizing, directing, and controlling functions of management and awareness of how internal and external business factors influence organizational operations.									
Course Objective									
Introduce student with production and its related issues and probable solution, course provide details understanding of concepts, tools, techniques and design aspects of operation, production and service, course provide details understanding of operation capabilities of organization along with how operational capabilities of an organization.									
Course Outcomes									
On successful completion of the course, the students will be able to:									
CO1	Understand fundamental concepts of production and operations management and their strategic role in organizations.								
CO2	Analyse process design, facility location, and layout decisions in manufacturing and service systems.								
CO3	Apply forecasting, capacity planning, and inventory management techniques for operational efficiency.								
CO4	Evaluate lean, JIT, service operations, and scheduling techniques using real-world business scenarios.								
Theory Syllabus									
Unit	Content								Hrs.
1	Introduction to Operations Management: Creating Value using Operations, Competitive Priorities and Capabilities, Operations Strategy, Trends and Challenges in Operations Management, Product & Service Designing: Characteristics of goods and services, Goods/Service Continuum, Product Development Process, Value Engineering, Quality Function Deployment, Design for Environment, Service design process, tools for service design.								15
2	Process Designing: Process Analysis, Process Structure in Services and Manufacturing, types of Production Systems, Product – Process Mix, Service - Process Matrix, Tools of Process Designing and redesigning, Facility Location Planning: Importance of Facility Location Decision, Factors Affecting, Location Selection, Location Planning Process, Designing Facility Layouts: Objectives of Facility Layout, Types of Layouts, Layout Planning, Service and Product Layouts, Assembly Line Balancing.								15
3	Demand Forecasting & Capacity Planning: Forecasting Process, Methods of Forecasting, Forecasting Techniques, Capacity Planning Decisions, Capacity Expansion Strategy, Inventory Management: Dependent and Independent Demand, Types of Inventory Cost, Objectives of Inventory Management, Inventory Control Systems – EOQ, Continuous, Periodic and ABC Analysis, Inventory Management Techniques.								15
4	JIT and Lean Production: Basic elements of Lean Systems, Characteristics of JIT, Key Processes to Eliminate Waste, Implementation of JIT, leans management, Service Operations: Services Capacity, Designing Services Process, Service Blueprinting, Service Quality, SERVQUAL, Operations Designing and Scheduling: Forward and Backward Scheduling, Finite and Infinite Loading, Sequencing or Prioritization, Work Flow Design, Case Study: Taj hotels.								15
Exam: Theory 70%, Numerical 30%									
Practical Content									
Practical, assignments and tutorials are based on above syllabus.									
Text Books									
1	Operations Management – Process and Supply Chains by Lee J Krajewski, Larry P. Ritzman, Manoj K Srivastava and Samir K Srivastava, Eleventh Edition, Pearson Publication								
Reference Books									

1	Operations Management –by Collier, Evans & Ganguly, 4 LTR series, Cengage Learning													
2	Agarwal N.K., Latest edition., McGraw Hill Publication													
3	Production and Operations Management by Kanishka Bedi, Publisher: OXFORD													
ICT/MOOCs Reference														
1	Production and Operations Management (NITTTTR Chennai) https://onlinecourses.swayam2.ac.in/ntr25_ed54/preview													
Mapping of CO with PO and PSO:														
Course Outcome (CO) No.	PO-CO Mapping								PSO-CO Mapping					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	2	1	2	1	1	3	2	3	2	1	1	1	1
CO2	3	2	1	3	1	2	3	2	3	2	2	1	1	3
CO3	2	3	1	3	1	2	3	3	2	3	2	1	1	3
CO4	2	3	2	3	1	2	3	3	2	3	3	2	2	3