

Branch Name:	MANGEMENT
Program Code:	MS301
Course Name:	Production And Operation Management
Course Code:	2MS3010304T
Pre-requisite Course:	Production and Operation Management, Productivity, Product Design, New Product Development, Modern Production Management Tools.

Course Objectives:

- 1) To provide an introduction to the functional area of production and operations management as practiced in manufacturing industries and the services sector.
- 2) To understand the strategic role of Production and operations management in creating and enhancing a firm's competitive advantages
- 3) To understand key concepts and issues of Production and Operations Management in both manufacturing and service organizations
- 4) Apply analytical skills and problem-solving tools to the analysis of the Production and operations problems

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
4	-	-	4	60	40	-	-	100

Subject Contents:

Sr. No.	Topic	Total Hours	Weightage (%)
1	Introduction to Production, System Concept of production, Concept of Productivity, Types of Production System	9	20%
2	Introduction to Product Design, New Product Development, Concepts, Steps in Product Design, Make or buy Decision.	9	20%
3	Facility Location Decision, Single Facility Location Problem, Gravity Location Problem (Examples), Concept of Plant Layout, Classification of Layout	9	20%
4	Quality Control, Need of Quality Control, Classification of Quality Control Techniques, Process Capability, Control Charts, Six Sigma	9	20%
5	Modern Production Management Tools, Just in Time Manufacturing, Total Quality Management, Kiazen, Lean Manufacturing, ISO	9	20%

Text Books:

Sr. No.	Books
1	R. Panneerselvam ,PHI Learning, Production and Operation Management

Reference Books:

Sr. No.	Books
1	Aswathappa K, Shridhara Bhat K ,Himalayan publishing House, Production and Operation Management
2	Chase R. B., Jacobs, F. R., Aquilano, N. J. and Agarwal N.K ,Tata McGraw Hill , Production and competitive Advantage
3	Kanishka Bedi, Oxford University Press , Production and Operation

LAB/Practical

1. Students should be taken to Industrial Visit to understand manufacturing and operation process
2. Expert talk from Managers can be arranged for students to understand operation systems.

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Understand the operations strategy formulation process aligned with corporate strategy.	1 Remembering, 2 Understanding
CLO2	Apply process flow concepts to solve decision problems in real situations in manufacturing and service sectors.	3 Applying, 4 Analyze
CLO3	Analyze decision making situations relating to inventory management in manufacturing Companies.	4 Analyze
CLO4	Understand the concepts Facility Location & Concept of Plant Layout and, make decision making situations and apply in manufacturing and logistics sectors.	2 Understanding
CLO5	Apply concepts of project management, SPC and Six Sigma to solve specific real world problems in manufacturing and service sectors.	4 Analyze, 5 Evaluate
CLO6	Understand and apply different Modern Production Management Tools and solve the critical problems faced in operations.	4 Analyze, 5 Evaluate

Mapping of CLOs with Pos & PSOs

Course	Program Outcomes(POs)								Program Specific Outcomes(PSOs)	
Learning Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CLO1	M	M	H	L	M	M	H	M	M	
CLO2	M	H	M	L	M	H	M	L		
CLO3	M	H	H	L	L	H	M	H	H	
CLO4	M	H	H	M	M	H	M	M	M	
CLO5	H	H	H	M	M	H	H	M	H	H
CLO6	H	H	H	L	L	H	M	M	H	H

H: High, M: Medium, L: Low
