



**M.B.A. Semester II**  
**PM02CMBA55: PRODUCTION AND OPERATIONS MANAGEMENT**

<b>Course Code</b>	<b>PM02CMBA55</b>	<b>Title of the Course</b>	<b>PRODUCTION AND OPERATIONS MANAGEMENT</b>
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ul style="list-style-type: none"><li>• To understand key concepts and issues of POM in both manufacturing and service organizations.</li><li>• To understand and appreciate the principles and applications relevant to the planning, design, and operations of manufacturing/service firms.</li><li>• To appreciate the strategic role of POM in creating and enhancing a firm's competitive advantages.</li><li>• To explain the various parts of the operations, production management processes and their interaction with other business functions (strategy, engineering, finance, marketing and HRM)</li></ul>
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<b>Course Content: 30 sessions</b>		
<b>Unit</b>	<b>Description</b>	<b>Weightage (%)</b>
1.	Nature and Scope of Production and Operations Management; Facility Location; Types of Manufacturing Systems & Layouts; Layout Planning and Analysis; Material Handling –Principles-Equipment, Line Balancing—Problems.	25
2.	Operations decisions-Production Planning and Control-In Mass Production-in Batch/Job Order manufacturing; Capacity Planning-Models; Process Planning-Aggregate Planning—Scheduling, Maintenance Management Concepts,	25
3.	Work-Study, Method Study, Work Measurement, Work Sampling, Work Environment-Industrial Safety; Material Management: An Overview of Material Management, Material Planning and Inventory Control; JIT; Materials Planning Budgeting.	25
4.	Material Requirement Planning; Purchase management; Stores Management; Quality Assurance – Acceptance Sampling, Statistical Process Control, Total Quality Management; ISO-9001; Six Sigma, Lean manufacturing, Maintenance Management; Safety Management.	25



**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.25))**  
**Syllabus with effect from the Academic Year 2021-2022**

Teaching-Learning Methodology	Class session, Assignments, Presentations, Discussion, Quiz, and projects
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<b>Evaluation Pattern</b>		
<b>Sr. No.</b>	<b>Details of the Evaluation</b>	<b>Weightage</b>
1.	Internal Written / Practical Examination	30%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance	30%
3.	University Examination	40%

<b>Course Outcomes: Having completed this course, the learner will be able to</b>	
1.	Analyse business processes in services/manufacturing for improvement.
2.	Identify the operational issues in the value addition processes of a firm.
3.	Apply analytical skills and problem-solving tools to resolve operational issues.
4.	Enhance employability.

<b>Suggested References:</b>	
<b>Sr. No.</b>	<b>References</b>
1.	B. Mahadevan, Operations Management- Theory and Practices Pearson, Latest edition
2.	Richard B Chase, F Robert Jacobs, Nicholas J Aquilano, & Nitin K Agarwal, Operations Management for Competitive Advantage, Tata McGraw-Hill, Latest edition
3.	Russell S. Roberta & Taylor, Operations Management, Prentice-Hall, Latest Edition
4.	Krajewski Lee, Operations Mgt. Process for Value Chains, Prentice-Hall, Latest Edition



<b>On-line Resources</b>
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NPTEL Course: Production and Operations Management <a href="https://nptel.ac.in/courses/110/107/110107141/">https://nptel.ac.in/courses/110/107/110107141/</a>
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NPTEL Course: Operations and Supply Chain Management <a href="https://nptel.ac.in/courses/110/106/110106045/">https://nptel.ac.in/courses/110/106/110106045/</a>
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Free Journals: <a href="http://www.spuvvn.edu/administration/service_centres/library/open_sources/free_ejournals.php">http://www.spuvvn.edu/administration/service_centres/library/open_sources/free_ejournals.php</a>
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Digital Library resources from <a href="http://www.spuvvn.edu/administration/service_centres/library/digital_library.php">http://www.spuvvn.edu/administration/service_centres/library/digital_library.php</a>
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