

Name of College: S. R. Luthra Institute of Management								
<b>Faculty</b>	Management			<b>Program</b>	Master of Business Administration (M.B.A.)			
<b>Year</b>	1			<b>Version</b>	2.0			
<b>Semester</b>	2			<b>Effective From</b>	June 2023			
<b>Course Code</b>	MGMB12207	<b>Course Name</b>	Production and Operations Management					
<b>Teaching Scheme</b>					<b>Examination Scheme</b>			
<b>Credits</b>	<b>Lecture (L)</b>	<b>Tutorial (T)</b>	<b>Practical (P)</b>	<b>ME</b>	<b>CE</b>	<b>SE</b>	<b>V</b>	<b>Total</b>
4	4	0	0	30	40	50	---	120

**Course Outcomes:**

<b>CO1</b>	<i>Analyze</i> contemporary production and operation management practices for a given Industry
<b>CO2</b>	<i>Compare and contrast</i> facility planning by making location and layout decisions for a manufacturing or service facility.
<b>CO3</b>	<i>Analyze</i> and select the most appropriate methods and tools for the solution of problems related to production planning, shop floor scheduling, and inventory control and project management.
<b>CO4</b>	<i>Evaluate</i> quality control measures and safety measures for production and operations systems
<b>CO5</b>	<i>Justify</i> the application of concepts of production and Operations management in various industries

**Mapping Course Outcomes to Program Outcomes:**

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>
<b>CO1</b>	3	3	1	2	2	2
<b>CO2</b>	3	3	1	3	1	3
<b>CO3</b>	3	3	2	2	1	3
<b>CO4</b>	2	2	2	2	1	2
<b>CO5</b>	2	2	2	2	3	2



Sr. No.	Module	Module Contents	CO	Contact Hours	Marks
1	I	<p><b>Introduction of Production &amp; Operation Management:</b></p> <ul style="list-style-type: none"> <li>• System and function view of organizations, scope</li> <li>• Products and services, Transformation process</li> <li>• Process design-different types of process with its merits and demerits, process performance and evaluation etc.</li> <li>• Product design; types of products designs with merits and demerits</li> </ul> <p><b>Facility location:</b></p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Operations strategies for multiple facilities</li> <li>• Factors affecting facility location planning for domestic and foreign operations</li> <li>• Factor and location rating</li> <li>• Break even analysis</li> <li>• Simple Median Model</li> <li>• Centre of Gravity model</li> <li>• Ardalan Heuristic for location planning of service facility</li> </ul>	1, 2	10	12
2	II	<p><b>Plant Layout:</b></p> <ul style="list-style-type: none"> <li>• Objectives</li> <li>• Different types of layout.</li> <li>• Assembly line balancing</li> </ul> <p><b>Aggregate Production Planning (APP):</b></p> <ul style="list-style-type: none"> <li>• Objectives</li> <li>• Strategies and cost of APP</li> <li>• Master production schedule</li> <li>• Rough cut capacity planning</li> </ul> <p><b>Material Requirement Planning (MRP):</b></p> <ul style="list-style-type: none"> <li>• Objectives and examples</li> </ul> <p><b>Inventory Management:</b></p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Uses of Inventory</li> <li>• Role of other functional departments</li> <li>• Types of costs</li> </ul>	2, 3	12	14

		• Examples			
3	III	<p><b>Operations scheduling:</b></p> <ul style="list-style-type: none"> <li>• Definition, Objectives, Types</li> <li>• Sequencing (n-jobs on m machine)</li> <li>• Assignment Problems</li> </ul> <p><b>Queuing systems/Waiting Line analysis:</b></p> <ul style="list-style-type: none"> <li>• M/M/1 model</li> </ul> <p><b>Project management:</b></p> <ul style="list-style-type: none"> <li>• Project scheduling by using network PERT/CPM</li> <li>• Crashing of project</li> </ul>	3	10	12
4	IV	<p><b>Quality management:</b></p> <ul style="list-style-type: none"> <li>• Definition, experts' views on quality</li> <li>• Dimensions of quality</li> <li>• Cost of quality</li> <li>• Statistical process control, control charts</li> <li>• Total quality management (TQM), Six sigma, ISO 9000 and other ISO series (Overview)</li> <li>• Just in Time production system</li> </ul>	4, 5	8	12

REFERENCE

1.	Baffa, E., & Sarin, R., (n.d.). <i>Modern Production and operations Management</i> , Wiley & Sons.
2.	Bedi, K. (n. d.). <i>Production and Operation Management</i> . OXFORD university press.
3.	Chase, R. B., Jacobs, F. R., Aquilano, N. J., & Agarwal, N. K. (n.d.). <i>Operations management for competitive advantage</i> . Tata McGraw-Hill.
4.	Chunawala. S., & Patel. R., (n.d.). <i>Production and Operations Management</i> . Himalaya.
5.	Collier, D., Evans, J., & Ganguly. K., (n.d.). <i>Operation Management</i> . Cengage.
6.	Heizer, J., Render, B., & Munson, C. (n.d.). <i>Operations management</i> . Pearson Education Canada.
7.	Kumar, A., & Meenakshi, N., (n.d.). <i>Production and Operation Management</i> . Cengage.
8.	Russell, R. S., & Taylor, B. W. (n.d.). <i>Operations and Supply Chain Management</i> . John Wiley & Sons.
9.	Starr. M., (n.d.). <i>Production and Operation</i> . Cengage.

