

Name of College: S. R. Luthra Institute of Management						
Faculty	Management		Program	Master of Business Administration (M.B.A.)		
Year	I		Version	2.0		
Semester	2		Effective From	July 2026		
Course Code	MMBA22205	Course Name	Production and Operations Management (POM)			
Teaching Scheme				Examination Scheme		
Credits	Lecture (L)	Tutorial (T)	Practical (P)	CCE	SEE	Total
4	4	0	0	50	50	100

Course Outcomes:

CO	Students will be able to
CO1	<i>Understand</i> contemporary production and operation management practices for a given Industry
CO2	<i>Analyze</i> facility planning by making location, layout and Transportation decisions for a manufacturing or service facility.
CO3	<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.
CO4	<i>Evaluate</i> quality control measures and safety measures for production and operations systems
CO5	<i>Justify</i> the application of concepts of production and Operations management in various industries

Mapping Course Outcomes to Program Outcomes:

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	1	2	2	2
CO2	3	3	1	3	1	3
CO3	3	3	2	2	1	3
CO4	2	2	2	2	1	2
CO5	2	2	2	2	3	2



Sr. No.	Module	Description	CO	Marks	Hours
1		Introduction of Production & Operation Management:			
	I	• System and function view of organizations, scope • Products and services, Transformation process • Process design-different types of process with its merits and demerits, process performance and evaluation etc. • Product design; types of products, New Product Development Process, Concepts in Product design. Facility location: • Introduction • Operations strategies for multiple facilities • Factors affecting facility location planning for domestic and foreign operations • Factor and location rating with Numerical. • Break even analysis with Numerical. • Simple Median Model • Centre of Gravity model • Ardalan Heuristic for location planning of service facility	1, 2	12	15
2	II	Plant Layout: • Objectives • Different types of layout with advantages and disadvantages • Assembly line balancing with Numerical Aggregate Production Planning (APP): • Objectives • Strategies and cost of APP with Numerical. • Master production schedule • Rough cut capacity planning Material Requirement Planning (MRP): • Objectives and examples Inventory Management: • Introduction • Uses of Inventory • Role of other functional departments • Types of costs • Examples	2, 3	14	16
		Operations scheduling: • Definition, Objectives, Types • Sequencing (n-jobs on m machine) • Assignment Problems Queuing systems/Waiting Line analysis: • M/M/1 Model			
3	III	Operations scheduling: • Definition, Objectives, Types • Sequencing (n-jobs on m machine) • Assignment Problems Queuing systems/Waiting Line analysis: • M/M/1 Model	3	12	16



4	IV	Project management:	4, 5	12	13
		- Project scheduling by using network PERT/CPM - Crashing of project			
		Quality management:			
		- Definition, experts' views on quality - Dimensions of quality - Cost of quality - Statistical process control, control charts - Total quality management (TQM), Six sigma, ISO 9000 and other ISO series (Overview) - Just in Time production system			
		Industrial safety			
		Use of AI Technology in Production and Operations Management			

References:

Books:	
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.

