9th Semester	16IMN901D	Sales and Operation Planning	L-T-P	3 Credits	35 hrs	
			3-0-0			

COURSE OBJECTIVES

- To make the students to familiarize on operations planning and control activities in both manufacturing and service organizations
- To build the students to take decisions on operations planning and control activities through by estimating forecasting future requirements, capacity, aggregate requirements, and material requirements

Module – 1 : Operations Planning: Introduction – Relationship between Sales and Operations Planning – Need for operation planning and control – Functions of operation planning and control – Different phases of operation planning and control – Comparison of operations planning and control activities in manufacturing and service organizations, Objective of Forecasting in operations – Elements of a good forecast – Major Factors that Influence the Demand Forecast – Classification of Forecasting Methods.

Module – II: Capacity Planning: Capacity Planning Classification – Measuring Capacity, Determining Capacity Requirements – Forecasting v/s Capacity Planning – Aggregate Operations planning – Concept of aggregation – Factors Affecting Aggregate Planning, Aggregate Planning Goals – Forecasts of Aggregate Demand – Aggregate Planning Techniques, Materials Requirement Planning (MRP)

Module – III: Operations Scheduling & Distribution Planning: Master Production Scheduling (MPS) – Meaning and Concepts – MPS Model – Purpose of Scheduling – Scheduling Methods: Forward Scheduling, Backward Scheduling, Scheduling Activities: Routing, Loading, Dispatching – Scheduling by Type of Operations: Job Operations Repetitive Operations, Labor–Intensive Operations, Service Operations. Role of ERP in operation planning and control, Operations planning Insights from the TOC school of thought

BOOKS:

- Ajay K Garg, Production and Operations Management, McGraw Hill Education (India) Pvt. Ltd., 2012, Reprint 2017.
- William J Stevenson, Operations Management, Twelfth Edition, McGraw Hill Education (India) Pvt. Ltd., 2017, Reprint 2018.
- R. Panneerselvam, Production & operations management, Prentice Hall India private limited, 2017.
- Aswathappa, K., ShridharaBhat, K., Production and Operations Management, Himalaya Publishing House, 2014
- Mahadevan B., Operations Management Theory and Practice, Pearson Publication, 3rd Edition, 2015
- Norman Gaither and Greg Frazier, Operations Management, 9th Edition, Cengage publications, 2002 (Reprint 2013)

77 | Page

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