Course Code	MB18OM05	Course Name	SALES AND OPERATIONS PLANNING	Course Category			L	T	P	C
							3	0	2	4

Pre-requisite Courses	*Successfully completed, a minimum test score achieved, or a specified condition satisfied before a student can enroll in the this course.*	Co-requisite Courses		Progressive Courses	*Certificate in Sales Management and Operations Planning and Control, etc.,*
Course Offering Department	*College of Management*	**Data Book / Codes/Standards**			

Course Learning Rationale (CLR):	*The purpose of learning this course is to:*	**Learning**		
		1	*2*	*3*
CLR-1 :	*Gain detailed knowledge on nature and concepts of Sales and Operations Planning*			
CLR-2 :	*Study the main areas of demand forecasting methods*			
CLR-3 :	*They will have insight of* Capacity Planning and MRP			
CLR-4 :	*Sustainable* Master Production Scheduling and Service Operations			
CLR-5 :	*Students will also be empowered to apply the* ERP in Operations			

Course Learning Outcomes (CLO):	*At the end of this course, learners will be able to:*	*Level of Thinking (Bloom)*	*Expected Proficiency (%)*	*Expected Attainment (%)*
CLO-1 :	Understand the process and information required for preparing the *Sales and Operations Planning*	*1*	*60*	*40*
CLO-2 :	Understand the insights on *demand forecasting methods*	*1*	*60*	*40*
CLO-3 :	Enhance the Capacity Planning and MRP	*2*	*50*	*50*
CLO-4 :	Understand the Master Production Scheduling and Service Operations	*2*	*50*	*50*
CLO-5 :	Analyze the ERP Solutions in Operations			

Program Learning Outcomes (PLO)

1	2	3	4	5	6	7	8
Business Environment & Domain Knowledge (BEDK)	Critical Thinking, Business Analysis, Problem Solving and Innovative Solutions (CBPI)	Global Exposure and Cross-cultured understanding (GECCU)	Social Responsiveness and Ethics (SRE)	Effective Communication (EC)	Leadership and Team Work(LT)	PSO - 1	PSO – 2
M	*H*	*M*	*H*	*H*	*M*		

Duration (hour)		9	9	9	9	9
S-1	SLO-1	Introduction – Nature and concepts of SOP	Objective of Forecasting in operations	Capacity Planning Classification	Master Production Scheduling (MPS) – Meaning and Concepts	Introduction of ERP
	SLO-2					
S-2	SLO-1	Relationship between Sales and Operations Planning	Elements of a good forecast	Measuring Capacity, Determining Capacity Requirements	MPS Model	Evolution of ERP
	SLO-2					
S-3	SLO-1	Applications of SOP	Factors that Influence the Demand Forecast	Forecasting v/s Capacity Planning	Purpose of Scheduling	need for ERP
	SLO-2					
S-4	SLO-1	Need for operation planning and control	Classification of Forecasting Methods	Aggregate Operations planning	Scheduling Methods: Forward Scheduling, Backward Scheduling	ERP Implementation methodology
	SLO-2					
S-5	SLO-1	Functions of operation planning and control	Qualitative Methods, Time series and Quantitative Models	Factors Affecting Aggregate Planning	Scheduling Activities: Routing, Loading, Dispatching	Benefits of an ERP System
	SLO-2					
S-6	SLO-1	Applications of OPC	Forecasting Accuracy and its measures	Aggregate Planning Goals	heduling by Type of Operations	Factors affecting ERP Implementation

	SLO-2					
S-7	SLO-1	Types of Supply Chain	Mean Absolute Deviation	Forecasts of Aggregate Demand	Sc Job Operations Repetitive Operations	Role of ERP in Operations planning and control
	SLO-2					
S-8	SLO-1	Different phases of operation planning and control	Mean Square Error (MSE)	Aggregate Planning Techniques	Labor–Intensive Operations, Service Operations	Operations planning Insights from the TOC school of thought
	SLO-2					
S-9	SLO-1	Comparison of operations planning and control activities in manufacturing and service organizations	Mean Forecast Error (MFE)	Materials Requirement Planning (MRP) Elements and Methods	*Case Study*	*Case Study*
	SLO-2					

Learning Resources	1. Ajay K Garg, Production and Operations Management, McGraw Hill Education (India) Pvt. Ltd., 2012, Reprint 2017. 2. William J Stevenson, Operations Management, Twelfth Edition, McGraw Hill Education (India) Pvt. Ltd., 2017, Reprint 2018. 3. R. Panneerselvam, Production & operations management, Prentice Hall India private limited, 2017. 4. Aswathappa, K.,ShridharaBhat, K., Production and Operations Management , Himalaya Publishing House, 2014

		Learning Assessment											
	Bloom's Level of Thinking	Continuous Learning Assessment (50% weightage)										Final Examination (50% weightage)	
		CLA -1 (5marks)		CLA -2 (5marks)		CLA-3 (10marks)		CLA -4 (15marks)		CLA -5(15marks)		Marks -100 which will be weighted at 50%	
		Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice			Theory	Practice
Level 1	Remember	50						35		35		35	
	Understand												
Level 2	Apply	25						35		35			35
	Analyze												
Level 3	Evaluate	25						30		30		30	
	Create												
	Total	100 %		100 %		100 %		100 %		100%		100 %	

CLA – 1-5: can be from any combination of these: Class Participation, Surprise Test, Cycle test, Model Examination, Mini-Projects etc.,

Course Designers		
Experts from Industry	Experts from Higher Technical Institutions	Internal Experts
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