



Program	Master of Business Administration (MBA)	Semester - 3
Type of Course	Major	
Prerequisite		
Rationale	-	
Effective From A.Y.	2024-25	

Teaching Scheme (Contact Hours)				Examination Scheme				
Lecture	Tutorial	Lab	Credit	Theory Marks		Practical Marks		Total Marks
				T	T	P	P	
4	-	-	4	50	30	-	-	150

SEE - Semester End Examination, T - Internal Theory, P - Internal Practical

Course Content		T - Teaching Hours W - Weightage	
Sr.	Topics	T	W
1	Overview of Production Planning and Control Overview of Production Planning and Control: ☐ Introduction ☐ Phases of production ☐ Functions of production planning and control ☐ Relationship of PPC with other departments ☐ Types of production systems ☐ Types, concepts, applications ☐ Levels of manufacturing: ☐ Aggregate planning ☐ Master production schedule ☐ Material requirement planning ☐ Manufacturing methods: ☐ Projects and job work ☐ Batch production ☐ Mass / flow production ☐ Continuous / process production	15	25
2	Prerequisites of PPC: & Demand Forecasting Prerequisites of PPC: ☐ Data pertaining to design, equipment, raw materials, tooling, performance standards, labor and operating systems. Demand Forecasting: ☐ Introduction. Meaning and need for forecast ☐ Quantitative and qualitative methods of forecast Order preparation: ☐ Work order preparation for different manufacturing methods ☐ Subsidiary orders ☐ Shop or production orders ☐ Inspection orders , ☐ Store issue orders Industrial Safety Management: ☐ Meaning, legal aspect of safety ☐ Causes of accident ☐ Work permit procedures in plant, safety equipment, PPE's, breathing apparatus, safety belt, etc.	15	25
3	Capacity Planning:	15	25



Course Content		T - Teaching Hours W - Weightage	
Sr.	Topics	T	W
	Capacity Planning: <input type="checkbox"/> Capacity Planning, Integrated Production Planning and Control. Facility or Layout Planning and Analysis: <input type="checkbox"/> Introduction Objectives of Layout <input type="checkbox"/> Classification of Facilities <input type="checkbox"/> Basis for Types of Layouts <input type="checkbox"/> Importance of layout decisions <input type="checkbox"/> Nature of layout problems <input type="checkbox"/> Redesigning of a layout <input type="checkbox"/> Manufacturing facility layouts <input type="checkbox"/> Layout Planning <input type="checkbox"/> Evaluating Plant Layouts <input type="checkbox"/> Assembly Line Balancing Material handling		
4	Scheduling: Scheduling: <input type="checkbox"/> Forms of Schedules <input type="checkbox"/> Factors influencing scheduling Product sequencing, dispatching: <input type="checkbox"/> Progress report & expectation of manufacturing lead time technique for aligning completion time & due dates. Aggregate Planning: <input type="checkbox"/> Introduction <input type="checkbox"/> Requirement of Aggregate Plan <input type="checkbox"/> Steps in Developing an Aggregate Plan <input type="checkbox"/> Advantages of Aggregate Plan <input type="checkbox"/> Aggregate Planning Strategies <input type="checkbox"/> Planning Options <input type="checkbox"/> Selecting the Method in Aggregate Planning <input type="checkbox"/> Aggregate Planning in Services Maintenance Management: <input type="checkbox"/> Meaning, type, scope <input type="checkbox"/> Maintenance budget <input type="checkbox"/> Shut down maintenance, break down maintenance, corrective maintenance, preventive maintenance	15	25
Total		60	100

Suggested Distribution Of Theory Marks Using Bloom's Taxonomy				
Level	Understanding	Application	Analyze	Create
Weightage	25	25	25	25

NOTE : This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.



Course Outcomes

At the end of this course, students will be able to:

CO1	Describe and determine the effect of product, process, inventory costs, product forecasting, operations strategies, and schedule design parameters on design of materials requirements planning, inventory planning, capacity planning, and production planning/control systems
CO2	Deduce the applicability of latest developments across the world in the domain of production planning and production control.
CO3	Assess the relationships between people, process, technology, productivity and quality and how it contributes to the competitiveness of firms.
CO4	Design, develop, and analyze a Master Production Schedule and a resultant Materials Requirement Plan (MRP) for a complete production facility.

CO PO Mapping

CO	CO - 1	CO - 2	CO - 3	CO - 4
PO - 1	3	2	2	3
PO - 2	3	3	3	3
PO - 3	1	1	2	1
PO - 4	2	3	2	2
PO - 5	1	1	2	2

Reference Books

1.	Production Planning and Inventory Control (TextBook) By Seetharama L. Narsimhan, Dennis W. McLeavy, Peter J. Billington Pearson latest
2.	Production Planning and Control: Concepts and Applications By Hari Raghu Rama Sharma Deep & Deep Latest