

St. Joseph's College of Commerce (Autonomous)

163, Brigade Road, Bangalore – 560025

LESSON PLAN

Subject Name: Production and Operations Management

Paper No. M1 15 MC 304

Lecture Hrs: 60

Objective: The course aims to explain the embodied concept, tools, and techniques utilized for managing production and operations function in an organization. The provided content will strengthen learners' knowledge towards various strategic options and barriers faced while implementation. At the end of the course, students will be able to evaluate and respond towards adoption of diverse operational strategies for business competitiveness.

S. No.	Modules and Topics	No. of Lectures (Hrs)	Pedagogy	Evaluation/Learning Confirmation
Module 1: Introduction to Production and Operations Management (8 Hrs)				
1	Meaning, scope, objectives, functions, problems, and benefits of production management; Difference between - production and manufacturing, manufacturing and service operations	2	Lecture	MCQs
2	Historical evolution of POM	2	Lecture	
3	Functions and responsibilities of a production manager; Relationship of production with other functions	2	Case study	Discussion
4	Systems or types of production	2	Lecture	MCQs
Module 2: Plant Location and Layout (10 Hrs)				
5	Plant location- concept, steps, factors affecting plant location (with relevant examples)	2	Lecture	Classroom Project
6	Plant layout - concept, theory, principles, characteristics, criteria, benefits	2	Lecture	
7	Plant layout- types; techniques; comparison of various types of plant layout	3	Lecture	
8	Organization of physical facilities – factory building, plant lighting, ventilation, sanitation; Employee safety & health; Protection measures and importance	3	Lecture	
Module 3: Material Management (12 Hrs)				
9	Material management- meaning, objective, scope, function, advantages and disadvantages	1	Lecture	Classroom Project
10	Material control – types; concept of EOQ, systems and techniques	3	Lecture	
11	Purchasing- concept, objective,	1	Lecture	

	importance, categories of purchasing needs; centralized and decentralized buying			
12	Selection of supplier; buyers preference for single or multiple suppliers	1	Lecture	
13	Purchasing policies; Vendor rating technique	2	Lecture	
14	Value analysis – value engineering; stores layout system	1	Lecture	
15	Material handling – objective, importance, principles, types of material handling techniques & equipment	3	Lecture Case study	Discussion
Module 4: Production Planning and Control (16 Hrs)				
16	PPC- concept, scope, significance, benefits and limitations	2	Lecture	MCQs
17	Production planning functions – estimating, routing, scheduling, loading	2	Lecture	
18	Production planning control – dispatching, follow up, inspection, corrective action	2	Lecture	
19	Quality control – meaning, objectives, benefit	2	Lecture	
20	Statistical Quality Control , Statistical Process Control, TQM, Quality control	5	Lecture	
21	Six sigma, Lean management	3	Case study	Discussion
Module 5: Time & Motion Study (8 Hrs)				
22	Concept of standard time	1	Lecture	Classroom Project
23	Method study- work measurement, techniques	2	Lecture	
24	Work study – need, benefits, techniques,	2	Lecture	
25	Time & motion study- procedure, purpose, work sampling, work simplification, micro-motion study	2	Lecture	
26	Charts, diagrams, work measurement	1	Lecture	Discussion
Module 6: Maintenance Management & Waste Management (6 Hrs)				
27	Maintenance- meaning, scope; types of maintenance – advantages and disadvantages	1	Lecture	MCQs
28	Maintenance scheduling, procedure & tools	2	Lecture	
29	Scrap and surplus disposal	2	Lecture	
30	Automation- meaning, consideration, advantages, forms of automation	1	Lecture	

Note: The case/assignment/project/ will be provided in advance through proper channel (e-mail/in-person).

Text/ Reference Books:

1. Buffa E. and Sarin R. (2008) Modern Production/Operations Management, Wiley India Publishing, 8/e

2. Adam E. and Ebert R. (2010) Production and Operations Management, PHI Learning Pvt. Ltd, 5/e
3. Chary S. N. (2012) Production and Operations Management, McGraw Hill Education, 5/e
4. Murthy P. R. (2008) Production and Operations Management, New Age International Publisher, 3/e
5. Murthy C.S.V. (2006) Production and Operations Management, Himalaya Publishing House, 1/e

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