COURSE TITLE	**PRODUCTION & OPERATIONS MANAGEMENT**
COURSE CODE	**04BB1401**
COURSE CREDITS	**4**

Course Outcomes: After completion of this course, student will be able to:

1 Analyse the relevance of production and operations management.

2 Enable the students to manage the productive resources for the growth and competitiveness of any organization

3 Apply principles and techniques in the design, planning and control of these systems to optimize /make best use of resources in achieving their objectives.

4 4 Apply the techniques of inventory management and quality management and to analyse and select the most appropriate methods and tools for the solution of problems related to production planning, shop floor scheduling and inventory control.

5 Evaluate the quality dimensions of production outcomes and their relevance.

Pre-requisite of course: None

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
4	0	0	50	30	20	0	0

Contents : Unit	Topics	Contact Hours
1	**INTRODUCTION to P&OM** Evolution of Production Management - Production System: production definition, meaning, nature, systems view, scope, objectives, Operations Management: manufacturing, production, operations, product vs services, produce vs product, Relevance of P&OM: role, importance, integration with other functions of the organization, Strategic management dimension of P&OM: types, decisions.	12
2	**PRODUCT DESIGN & DEVELOPMENT** Product Development: its concepts, steps of product development and design, Process Planning and Design: selection of process, process selection decisions , Process Planning Design, Standardization & Simplification, Make or Buy decisions , Ergonomic considerations in Product Design.	12

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Contents : Unit	Topics	Contact Hours
3	**FACILITIES MANAGEMENT** Facility Location: significance, kinds of locations, relevance of various factors and its assessment, Break-Even Analysis and Factor Rating Method applications in selection of a facility , Facility Layout: importance, principles, design types and its features and advantages	12
4	**MATERIAL RESOURCE MANAGEMENT** Materials Management: importance, objectives, issues, functions, Purchase Management: principles of purchasing, functions of purchasing, purchase procedure, types of purchasing, Inventory Management: inventory control, inventory decisions, P and Q system model concepts, EOQ model with or without discount applications, Incoming Materials Control: ABC, XYZ, VED, FSN analysis concepts.	12
5	**QUALITY MANAGEMENT** Quality and its Control: meaning, definitions, dimensions of quality, quality improvement and cost reduction, purpose of quality control, quality system, inspection and sampling, applications of control charts for variables and attributes, Total Quality Management: dimensions of quality, principles, benefits, Deming's 14 principles , Quality Circles , ISO Series of Quality Standards.	12
Total Hours		**60**

Textbook :

1 Production and Operations Management , R. Pannerselvam, PHI Learning Pvt. Ltd, 2012

References:

1 Production and Operation Management, Production and Operation Management, K. Aswathappa and K. Shridhara Bhat, Himalaya Publishing House, 2018

2 Production and Operation Management, Production and Operation Management, S. Anil Kumar and N. Suresh, New Age Publication, 2015

3 Operations Management, Operations Management, Russel and Taylor, Wiley, 2008

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation

Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
0.00	0.00	35.00	35.00	30.00	0.00

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Instructional Method:

1 Theory

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