

COURSE TITLE	PRODUCTION & OPERATIONS MANAGEMENT
COURSE CODE	04BC0326
COURSE CREDITS	4

Objective:

- 1 NA

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

- 1 Understand the significance of production and operations management in enhancing industrial efficiency and organizational performance.
- 2 Demonstrate the ability to manage productive resources effectively to promote organizational growth and competitiveness
- 3 Identify and analyze key issues related to production planning, scheduling, and operational decision-making.
- 4 Apply appropriate principles, models, and techniques in the design, planning, and control of production systems to optimize the use of resources.
- 5 Utilize techniques of inventory management and quality management to support operational efficiency.
- 6 Select and implement suitable tools and methods to address challenges in production planning, shop floor scheduling, and inventory control.

Pre-requisite of course:NA

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 Meaning, Nature and Scope of Production and Operation Management, Types of production processes, Plant location and Layout: Factors considered in location, Types of Layout	12
2	Forecasting Importance of forecasting and types of forecasting, general principle of forecasting, forecasting techniques- qualitative and quantitative (with numerical)- accuracy of forecasting method.	12
3	Materials Management Importance of Materials Management, Concept of purchasing, principles of purchasing and process of purchasing. Types of purchasing: Inventory management, its prime importance, Inventory Control Techniques - ABC, FSN, GOLF, VED, SOS (only concepts)	12

Contents : Unit	Topics	Contact Hours
4	Methods Study & Maintenance Management Methods Study, Motion study, Work Study and Time Study: (with numerical), Maintenance Management: Need of maintenance management, Types of maintenance management,	12
5	Quality Management lean manufacturing, JIT, Kaizen, ISO series, TQM, 7 Quality control tools old and new both, Six-sigma quality control tools	12
Total Hours		60

Textbook :

- 1 Production and Operation Management, K. Aswathappa and K. Shridhara Bhat, Himalaya Publishing House, 2023

References:

- 1 Production and Operation Management, Production and Operation Management, S.A.Chunawalla and D.R. Patel, Himalaya Publishing House, 2017
- 2 Production and Operation management, Production and Operation management, Kanishka Bedi, Oxford higher education , 2012
- 3 Operations Management, Operations Management, Mahadevan B, Pearson Education, 2010

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	10.00	30.00	30.00	20.00	10.00

Instructional Method:

- 1 Lecture

Supplementary Resources:

- 1 https://www.oxfordhomestudy.com/courses/online-management-courses/operations-management-free-courses?utm_source=chatgpt.com