

PGDM 2021-23

SEMESTER I

Course Code	:	
Course Title	:	Introduction to Operations Management
Semester	:	I
Credits	:	2
Contact Hours	:	20 Hrs
Course Faculty	:	

Course Description:

This course is an introduction to the concepts, principles, problems, and practices of operations management. Emphasis is on managerial processes for effective operations in both goods-producing and service-rendering organization. Topics include nature and scope of Operations Management, new product development, facility planning, capacity planning, operations planning & control, inventory management and quality management. Classroom sessions for all topics will be supplemented with case studies, video clips and class room exercise along with regular evaluation through quiz and class tests. Recent developments in Operations such as Industry 4.0 and circular economy are discussed. After the completion of the course students should be able to understand the importance of basic operations and manufacturing in industry, be aware of the role of Operations management. They should also be able to apply the decision-making criteria for facility location, layout, capacity planning, various inventory and quality management tools and its application in their professional career.

Contents:

- Introduction to Operations Management
- New Product Development
- Facility Location
- Facility Layout
- Class Test 1
- Operations Planning & Control
- Inventory Management
- Quality Management
- Future of Operations
- Role of Operations in Various Sectors
- Pre and Post Covid Strategies

Session Plan

Sessions	Topics / Sub Topics	Case Studies / Class Activities
1, 2	<u>Introduction to Operations Management</u> Operations management of Manufacturing and service sectors, Transformation process, Goods and Services, Types of Production Systems, Operations strategy and role of Operations in Corporate strategy, Interface of Operations with other management areas	Video-based discussion Videos on Different types of Production Systems
3,4	<u>New Product/Service Development</u> New product development cycle, reasons for failure of new products, Outsourcing and Offshoring of new product development - over-view	Case Study on new product development. Video on new product design and Dev
5	<u>Facility Location</u> Strategy for new location and various Methods for selecting a site for a factory	Case study – Tata Nano Classroom exercise on plant location

6	Facility Layout Objectives, Various types of plant layout in manufacturing and service industry. Steps for determining layout	Video (Prentice-Hall) based discussion on facility lay-out. Video on Process Layout (Garment Factory)
	Class Test	
7,8	Production / Operations Planning & Control Aggregate planning, Capacity Planning, Material requirement planning, Production / Operation Planning and Control.	Case study on Production control Classroom exercise on production plan
9,10	Inventory Management Inventory Management: inventory types, inventory costs, Importance of inventory control and methods of inventory control	Classroom Exercise on EOQ, ABC Analysis.
11, 12	Quality Management Definition of quality and quality control methods, Dimensions of quality, Cost of quality, QC Tools, Six Sigma, ISO	Video on service quality – discussion
13	Future of Operations Circular Economy, Industry 4.0, Product Design	
14	Role of Operations in Various Sectors	
15, 16	Presentation	

Evaluation:

Internal Assessment	20 Marks
End term Exam	30 Marks
Internal Assessment:	
Presentation / Assignment	5 Marks
Class Test	5 Marks
Attendance	5 Marks
Class Participation	5 Marks
Total	20 Marks

Text Book:

- 1) Production and Operations Management - K. Ashwathappa & K. Shridhara Bhatt, Himalaya Publications, 2nd Edition, 2008, Reprint 2018

Reference Book:

- 1) Production and Operations Management - Chase, Ravi Shankar, Jacobs
Mc Graw Hill, 14th Edition, 2014, Reprint 2017
- 2) Operations Management- Theory and Practice - B.Mahadevan, Pearson, 3rd Edition, 2015
- 3) Operations & Supply Management: - S.N. Chary, Mc Graw Hill Education (India) Pvt Ltd
5th Edition, Reprint 2013,
- 4) Operations Management - William J. Stevenson, Mc Graw Hill, 12th Edition, 2017
- 5) Production and Operations Management - Kanishka Bedi, OXFORD, 3rd Edition, 2013

E-Book:

- 1) Operations Management Roberta Russell and Bernard Taylor

[file:///C:/Users/user1/Downloads/Stevenson%20-%20Operations%20Management%2013th%20Edition%20c2018%20\(%20PDFDrive.com%20\)%20\(1\).pdf](file:///C:/Users/user1/Downloads/Stevenson%20-%20Operations%20Management%2013th%20Edition%20c2018%20(%20PDFDrive.com%20)%20(1).pdf)

- 2) Operations Management Nigel Slack, S Chambers & R Johnston

http://carlbamford.weebly.com/uploads/4/4/1/3/4413567/operations_management_6th_ed.pdf

- 3) Operations Management Notes by Anna University --

[file:///C:/Users/user1/Downloads/UNIT%20-%20I%20INTRODUCTION%20TO%20PRODUCTION%20AND%20OPERATION%20MANAGEMENT%20\(%20PDFDrive.com%20\).pdf](file:///C:/Users/user1/Downloads/UNIT%20-%20I%20INTRODUCTION%20TO%20PRODUCTION%20AND%20OPERATION%20MANAGEMENT%20(%20PDFDrive.com%20).pdf)

- 4) Operations Management -- William Stevenson, Mc - Graw Hill, Edition 12, 2014

http://ebook3000.com/Operations-Management--12th-edition_389046.html