

GUJARAT TECHNOLOGICAL UNIVERSITY
MPM (MASTERS IN PHARMACEUTICAL MANAGEMENT)
DUAL DEGREE PROGRAMME
Year – V (Semester – X) (W.E.F. January 2017)

Subject Name: Production Management

Subject Code: 4310202

1. Course Objective

The objective of the course is to:

- a) Understand the role of the production management (PM) function in the functioning of an organization and
- b) Offer a broad survey of the concepts and tools used in operations management.

2. Course Duration:

The course is divided into five modules. Each module consists of 8 sessions of 75 minutes each and carries a weightage of 14 marks.

3. Course content:

Module No.	Modules/Sub-Modules	Sessions	Marks
I	Understand the importance of the PM function and its strategic importance, various types of manufacturing and service systems, the systems approach to PM. Introduction to Operations Management, operations strategy and competitiveness, product design and process selection for manufacturing and services. Facility location and layout.	8	14
II	Understand the basis of inventory management decisions, the hierarchical approach to planning and various methods of inventory management. Forecasting, inventory systems for independent demand, inventory management under uncertain demand, inventory systems for dependent demand, aggregate planning.	8	14
III	Understand various methods of operations scheduling and the management large projects. Operations scheduling, project management.	8	14
IV	Understand the issues associated with the management of queues and the management of supply chains. The management of queues, applications in manufacturing and services, supply chain management.	8	14
V	Understand the concepts of quality management and the usage of statistical tools for quality management. Develop an understanding of Japanese manufacturing management philosophies. Quality management, statistical quality control, JIT production systems.	8	14

4. Teaching Methods:

The course will use the following pedagogical tools:

- (a) Case discussion covering a cross section of decision situations.
- (b) Discussions on issues and techniques
- (c) Projects/ Assignments/ Quizzes/ Class participation etc

5. Evaluation:

The evaluation of participants will be on continuous basis comprising of the following elements:

A	Projects/ Assignments/ Quizzes/ Class participation etc	Weightage 10% (Internal Assessment- 10 Marks)
B	Mid-Semester examination	Weightage 20 % (Internal Assessment-20 Marks)
C	End –Semester Examination	Weightage 70% (External Assessment-70 Marks)

6. Basic Textbooks (Latest Edition):

Sr.No	Author/s	Name of the Book	Publisher	Edition and Year of Publication
T1	Kanishka Bedi	Production and Operation Management	Oxford University Press	2 nd Edition (or later)
T2	Chase R. B., Jacobs, F. R., Aquilano, N. J. and Agarwal N. K.,	Operations Management for Competitive Advantage	Tata McGraw Hill	11 th edition
T3	Russell, Roberta S. and Taylor, Bernard W	Operations Management Along the Supply Chain,	John Wiley and Sons (Wiley India)	6 th Edition
T4	Kachru Upendra	Production and Operations Management	Excel Books.	1 st Edition

7. Reference Books:

Sr.No	Author/s	Name of the Book	Publisher	Edition and Year of Publication
R1	K. Aswathappa and K. Shridhara Bhat	Production and Operations Management	Himalaya Publications	2009 or later.

R2	S. A. Chunawala, Dr. Patel	Production and Operation Management	Himalaya Publications	Latest Edition
R3	Martin K. Starr	Production and Operation Management	Cenagage Learning	Latest Edition
R4	Upendra Kachra	Production of Operations Management- Text and Cases	Excel Book	Latest Edition
R5	Buffa, Elwood S. and Sarin, Rakesh K	Modern Production and Operations Management,	John Wiley and Sons(Wiley India)	8 th edition
R6	Heizer, Jay and Render, Barry	Operations Management	Pearson Education	8 th edition
R7	Shah, Janat,	Supply Chain Management: Text and Cases	Pearson Education.	Latest Edition
R8	Evans / Collier	Operation Management	Cenagage Learning	Latest Edition
R9	Robert Klassen, Larry J. Menor	Cases in Operations Management	SAGE	Latest Edition
R10	Frank Rowbothan	Operations Management in Context	Butter Worth Heinemann	Latest Edition

8. List of Journals/Periodicals/ Magazines/ Newspapers etc.

Productivity Journal, Indian Management, Business India, Supply Change, etc.

9. Session Plan:

Production & Operations Management (POM)

Session No.	Topic
1	Introduction
2	Operations Strategy and Competitiveness
3-4	Product Design and Process Selection - Manufacturing
5-6	Facility Location
7-8	Facility Layout
9-11	Forecasting
12-15	Inventory Management
16	MRP
17	Aggregate Planning
18-20	Operations Scheduling
21-24	Project Management
25-28	Queuing - The Management of Waiting Lines
29-32	Supply Chain Management
33-37	Quality Management and Statistical Quality Control
38-40	JIT and Japanese Manufacturing

The Instructor/s (Faculty Member/s) will be required to guide the students regarding suggested readings from the Text(s) and references in items 6 and 7 mentioned above.