

MANGALORE UNIVERSITY
DEPARTMENT OF BUSINESS ADMINISTRATION
MASTER OF BUSINESS ADMINISTRATION (MBA)

MBAS 455: PRODUCTION AND OPERATIONS MANGEMENT

Workload	: 04 hours per week - Total credits: 4
Examination	: 3 hours; 30 marks continuous evaluation & 70 marks final examination.
Objectives	: The course aims at familiarizing the students with the production process and related issues in industrial Units. It introduces the students to aspects like quality, Inventory, Maintenance, materials management; and Methods analysis.
Pedagogy	: Lectures, assignments, Industrial visits and practical exercises, discussions, seminars.

1. **Production Function:** An introduction, Historical background of Modern Industry, definition and types of Production systems. Organisational structure and its interaction with other functional departments. The role of operations manager. An introduction to production planning and control. Operations Management and Strategy, Tools for Implementation of Operations, Industry Best Practices.
2. **Operations Strategy:** Operations Strategy, Competitive Capabilities and Core Competencies, Operations Strategy as a Competitive Weapon, Linkage Between Corporate, Business and Operations Strategy, Developing Operations Strategy, Elements or Components of Operations Strategy, Competitive Priorities, Manufacturing Strategies, Service Strategies, Global Strategies and Role of Operations Strategy
3. **Facility Planning:** Facilities location decisions, factors affecting facility location decisions and their relative importance for different types of facilities, Facility location models. Facility layout planning. Layout and its objectives for manufacturing operations, warehouse operations, service operations, and office operations., principles, types of plant layouts – product layout, process layout, fixed position layout, cellular manufacturing layouts, hybrid layouts, Factors influencing layout changes.
4. **Product, Process and capacity design:** Types of processes, Choosing the service processes, capacity planning, line balancing, Job shop scheduling, sequencing and applications. Use of computers in production management.
5. **Quality Management:** Quality control concept, quality circles & the emerging concepts of total quality control. Control charts X and R charts. P control charts, control charts. Importance in cost reduction-basic concepts and procedures.
6. **Material requirement planning:** Dependent inventory models, MRP structure, benefits of MRP. Maintenance Management: Maintenance concept, preventive maintenance, maintaining system reliability.

7. **Just-In-Time:** Introduction, Characteristics of JIT, Key Processes to Eliminate Waste, Implementation of JIT, Pre-requisites for implementation, JIT Inventory and Supply Chains.
8. **Total Quality Management:** Meaning and Dimensions of Quality, Quality Control Techniques, Quality Based Strategy, Total Quality Management (TQM), Towards TQM – ISO 9000 as a Platform – Working with Intranet, Total Productive Maintenance (TPM)

References:

1. Chase, Aquilano and Jacob-Productions and Operations Management - Irwin/McGraw-Hill
2. Gopalakrishnan and Sundareshan- Material Management - An integrated approach.- PHI
3. Adam and Erbert-Production and Operations Management- PHI
4. Krajewski and Ritzman-Operations Management, Strategy and Analysis-Addison Wesley
5. Chary -Theory and Problems in POM-Tata McGraw Hill
6. P.B Mahapatra-Computer aided production Management-PHI
7. Render and Heizer-Production and Operations Management-PHI
- Buffa -Modern Production Management- John Willey

