

## PRODUCTION AND OPERATIONS MANAGEMENT

### Objectives :

The course is designed to acquaints the students with the basic problems of manufacturing and service operations and with different types of decisions required with different types of decisions required which planning , scheduling ,and control of these operations .The course also aims at making efficient plant location and layout , How replenishment and control of materials and maintenance of facilities play in improving productivity and quantity of output .

### Contents :

Nature and scope of production and operations management; Facility Location; Types of manufacturing systems & Layouts; Layout Planning and analysis; Material Handling – Principles – Equipments, Line balancing – Problems; Operations decisions – production Planning and control – In mass production – In Batch /Job order manufacturing; Capacity planning ,Process Planning – Aggregate planning – Scheduling, Maintenance management concept – work study , method study, Work measurement, Work sampling, Work environment – Industrial safety; Material management – Overview Material Planning and inventory Control; JIT ; Materials planning Budgeting and Material requirement planning,Purchase management , Stores management ,Quality assurance – Acceptance sampling , Statistical process control, Total quality management , ISO – 9000 , Safety management.

### References:

1. K. Ashwathappa and k.Shridhar Bhatt ; Production and Operations managemet , Himalaya publishing , Mumbai , Latest edition
2. Adam , E E & Elbert R.J ; Production and Operations managemet , Prentice Hall of India , Latest edition
3. Buffa , ES , Modern Production Management , John woeley Publishing company , Latest edition .
4. S.A Chunawala and D.R Patel ; Production and Operations managemet , Himalaya publishing , Mumbai , Latest edition
5. Gaither Norman , Production and operations management , the Dryden press
6. B.Mahadevan ; Operations Mgmt – Theory and Practices , Dorling Kindersley (India) , First Impression , 2007
7. James B. Dilwarth , Operations managemet - Design , Planning and control for manufacturing and Services .