PME6I101  PRODUCTION AND OPERATION MANAGEMENT

Objective: The course aims at acquainting all engineering graduates irrespective of their specializations the basic issues and tools of managing production and operations functions of an organization.

MODULE I

MODULE II
5. Forecasting : Principles and Method, Moving Average, weighted Moving Average, Exponential Smoothing, Winter's Method for Seasonal Demand, Forecasting Error. (4 Hours)

MODULE III
8. Inventory Control : Relevant Costs, Basic EOQ Model, Model with Quantity discount, Economic Batch Quantity, Periodic and Continuous Review Systems, Safety Stock, Reorder Point and Order Quantity Calculations. ABC Analysis. (4 Hours)
REFERENCE BOOK:
3. Aswathappa & Bhatt – Production & Operations Management, HPH.
5. Russell & Taylor - Operations Management, PHI Publication
7. E.E. Adam and R.J. Ebert “Production and Operations Management”, Prentice Hall of India

Production and Operation Management Practical

1. Do Work Sampling of any work situation and determine how much time is spent in value addition, inspection/checking, communication and idleness.

2. Collect layout of any industry/institute and design layout of similar industry/institute to be constructed on a different site.

3. Select two or more possible locations for setting up of an industry/institute and do comparative evaluation with respect to different parameters.

4. Gather sample data about stock of different items, their consumption pattern and price from any one of the following business firms such as Automobile Repair Shop, Medicine Store, Consumer Store, Production Shop, Service Centre etc and suggest stock that should be maintained for optimizing Inventory.

5. Hands on practice on any Manufacturing Execution System (MES) software/ERP suit such as NetSuite Manufacturing, IQMS MES Software, Fishbowl Manufacturing, JobBOSS, MES SIMATIC IT, etc.

6. Hands on practice on simulation software for manufacturing/supply chain/logistics, such as Arena, Witness, Flexsim, Plant Simulation, AnyLogic, Simio, etc.

*Students may do 2 to 3 activities individually or in group