

IMN603:OPERATIONS MANAGEMENT-II

Module-I: Plant Location & Layout :

Nature; Freedom of location; Errors in location; Steps in location; Locational models – Factor Rating, Point rating, Break Even Analysis, Quantitative factor analysis; Layout – meaning, Definition & scope; Factors influencing layout; Principles of layout; Types of layout – process, Product, static, group technology, hybrid; Work Study & Work Measurement:

Introduction, objectives, Method study, Time study, relationship of time & motion study to work Study, work measurements – benefits, steps & techniques (time study, synthesis method, analytical estimation)

Module-II: Aggregate Planning :

Nature & objective, Need & steps, approach, costs, problem structure, capacity planning – types, measures decisions, classification; generation of alternative capacity plans, framework for analyzing capacity planning decisions; Aggregate capacity planning strategies – (Level capacity plan, Matching capacity with aggregate demand plan).

Module-III:Resource Requirements Planning:

Nature, Resource Requirements Planning system, MRP – I, MRP – II, Operation of MRP system, MRP computational procedure, Issues in MRP, Benefits from MRP, Implementation of MRP; Master production schedule (MPs), capacity Requirement Planning (CRP)

Module-IV: Project Planning & control:

Nature, Project life cycle, project organization, Role of a project Manager, problems in Managing a project, Project Planning & Control techniques – CPM, PERT;

Quality Assurance & Control: Meaning, the quality assurance system, choice & process & reliability, Control of quality, kinds of control, controlling the quality of services; Quality Control – nature, ensuring quality, quality control techniques; Statistical Quality control (SQC); types of control charts – Xchart, Rchart, construction of X – R chart.

Reference Books:

- 1) Production & Operations Management : K Aswthappa & K S Bhatt(HP)
- 2).Production & Operations Mgmt.: R. Paneerselvam(PHI)
- 3). Production & Operations Management : S.N.Chary.
- 4). Modern Production & Operations Management : Buffa and Sarin
- 5). Essence of Operations Management : Terry Hills (PHI)