

## **(10) Operation Management**

### **Unit I**

*Production /Operations Management – Meaning – Importance-historical contributions systems View of OM- Functions Of OM- Efficiency and effectiveness- Types Of Production Systems.*

### **UNIT II**

*Forecasting-Need and Importance, Qualitative and Quantitative methods of forecasting.*

### **Unit III**

*Production Planning and control – meaning – functions-aggregate planning – master production schedule(MPS) – Material Requirement Planning(MRP) – BOM – Capacity Requirement planning (CRP)- Techniques – Problems in MRP and CRP.– an introduction to MRP II and ERP –Facilities Planning-Work system Design-Managing Information for Production system-Scheduling and Sequencing .*

### **UNIT IV**

*Materials Management- Functions –Dependent and Independent Demand System- material planning and budgeting – Value Analysis-Purchase functions and procedure – inventory control types of inventory – safety stock-Order point – service level – inventory control systems – perpetual – periodic - JIT – KANBAN*

### **UNIT V**

*Total quality Management concept - Statistical Quality control for Acceptance Sampling and Process Control – Concept of O.C.C. Curve – Concept of Type I and Type II error – Quality movement – Quality circles – ISO Quality certifications and types – Quality Assurance – Six Sigma Concept.*

### **UNIT VI**

*Emerging Issues in Planning /Operations Management: Total Productive Maintenance, Advanced manufacturing system, Computers in planning /operations management.*