

## **(17) Total Quality Management**

### **UNIT-I: ASPECTS OF QUALITY**

Quality mission, policy and objectives; concepts, evolution and determinants of quality; interpretation and process of quality audits; cost of quality and economics of quality. Contribution of quality gurus -Shewhart, Juran, Figenbaum, Ishikawa, Deming and Taguchi; SPC, SQC, CWQC, TPM, TQC.

### **UNIT – II: TOTAL QUALITY MANAGEMENT**

Definition, underlying concepts, implementation and measurement of TQM, Internal Customer-Supplier relationship, QFD, Quality Circles, Quality improvement teams, team work and motivation in TQM implementation, training and education, role of communication in implementing TQM, policy deployment. Quality culture and leadership.

### **UNIT – III: MANAGEMENT OF PROCESS-I**

Processes in service organization and their control, simple seven tools of quality control: Check Sheet, Histogram, Scatter diagram, Process Mapping, Cause and Effect diagram, Pareto analysis. control charts and Advanced tools of quality.

### **UNIT-IV : MANAGEMENT OF PROCESS-II**

SQC: Control Charts for variables – X, Xbar, and R charts and control charts for attributes-p, np, and c charts. Acceptance sampling plan and occurrence Vendor selection and vendor rating.

### **UNIT – V: MANAGEMENT OF QUALITY**

Facets of quality planning, quality improvement methods, Kaizen, quality audits, medical audit, accreditation, nursing care standards, Six Sigma, JIT and NABL.

### **UNIT – VI: SYSTEMS APPROACH TO QUALITY**

Introduction to ISO 2000, ISO 9000, ISO 14000 and ISO 18000.  
Documentation of quality systems, quality manual, procedure manuals, work instruction manuals and records for ISO 2000.- Bench Marking and Business Process Reengineering Definition, methodology and design, evaluation and analysis. Environmental Management system- Management system for safety and health.

### **UNIT – VII: SYSTEMS APPROACH TO QUALITY**

Auditing and Certification, Awards and Certification.