Course Code: MBASC 213

Course Outcomes

Upon successful completion of the course the student should be able to:

1. Assess the importance of Quality in an organization.
2. Describe the contributions on Quality by pioneers of the field.
3. Evaluate quality policy by applying relevant tools.
4. Deploy statistical quality control techniques.

5. Describe Quality Management Awards and frameworks.

Unit 1
Introduction to Quality- Definition of Quality- product, user, value, and manufacturing-based perspectives, Dimensions of Quality, Quality Planning, Quality costs- optimization of quality costs, seven tools of quality control; Philosophies of Quality Gurus- Deming, Juran, Crosby, Feigenbaum, Ishikawa, Taguchi. Comparison of Quality Philosophies.

Unit 2
Customer satisfaction – Customer Perception of Quality, Customer Complaints, Service Quality, Customer Retention, Employee Involvement – Motivation, Empowerment, Teams, Recognition and Reward, Performance Appraisal, Benefits.

Unit 3
Benchmarking – Reasons to Benchmark, Benchmarking Process, Quality Function Deployment (QFD) – House of Quality, QFD Process, Benefits, Taguchi Quality Loss Function, Total Productive Maintenance (TPM) – Concept, Improvement Needs, FMEA – Stages of FMEA.

Unit 4
Statistical Process Control-Introduction to Quality characteristics variables and attributes, Types and causes of variations, Control Charts for variables and attributes, Process capability.

Unit 5
Acceptance Sampling-Sampling process and lots formation; Advantages and applications of acceptance sampling; characteristics of O.C. Curve; Single, double, multiple, sequential sampling; ASN, ATI, AOQL, AOQ, AQL, LQL, Producer‟s and Consumer‟s risks.

Unit 6
Six Sigma and ISO 9000:2000- Principles of Six Sigma, Statistical basis, Tools and techniques, DMAIC principle, application of six sigma in manufacturing and service organizations, structure of ISO standards, Factors leading to ISO, Implementation and registration, Benefits of ISO.

Text Books:

- Dale H. Besterfield, Carol Besterfield-Michna, Total Quality Management International Edition, 3/E, Pearson Education
- Adrian Wilkinson, Tom Redman, Ed Snape, Mick Marchington, Managing with Total Quality Management, Springer

Reference Books:
- Paul Levy, Total quality management in the supply chain, Springer
- Terry Richardson, Total Quality Management, Cengage Learning
- Stephen George, Arnold Weimerskirch, Total Quality Management: Strategies and Techniques, Pearson Education

Logistics Management **Credits - 4**