

Master of Business Administration (MBA) Syllabus

Paper Code – MB205– 1 Open Elective –IV

1. TOTAL QUALITY MANAGEMENT

Unit-I: TQM- History and Evolution:

Connotations of Quality, Quality Dimensions – Product and Service. The concept of TQM, Evolution of TQM – Inspection, SQC, QA and TQM. Conventional quality management versus TQM. Customer supplier focus in TQM. Benefits and Costs of TQM. Historical perspectives of TQM. Quality System Awards and Guidelines – ISO, Malcolm Baldrige National Quality Award (MBNQA), European Foundation for Quality Management (EFQM).

Unit – II: Tools of TQM:

① Measurement Tools: Check Sheets, Histograms, Run Charts, Scatter Diagrams, Cause and Effect Diagrams, Pareto's Chart, Process Capability Measurement. ② Analytical Tools: Process Mapping, Regression Analysis, Resource Utilization and Customer Service Analysis, The Five Why's, Overall Equipment Effectiveness. ③ Improvement Tools and techniques: Kaizen, JIT, Quality Circles, Forced field Analysis, Five S's. ④ Control Tools: Gantt Chart, Network Diagram, Radar Chart, The PDCA cycle, Milestone Tracker Diagram and Earned Value Management.

Unit – III: Techniques of TQM:

① Quantitative techniques: Failure Mode Effect Analysis (FMEA), Statistical Process Control (SPC), Quality Function Deployment (QFD), Design of Experiments (DOE), Quality by Design and Monte Carlo Technique (MCT). ② Qualitative techniques: Benchmarking, The Balanced Scorecard, Sales and Operations Planning, Kanban and Activity Based Costing (ABC). ③ Taguchi methods: Quality loss function, Orthogonal arrays, Signal-to-Noise ratio: Nominal- the- best, Target-the-best, Smaller the-best, Larger-the-best. Parameter design, Tolerance design.

Unit – IV: Six Sigma:

The concept of Six Sigma, Objectives of Six Sigma, The frame-work of Six Sigma programme, Six Sigma Organization: roles and responsibilities, Six Sigma problem solving approach: The DMAIC model, Six Sigma Metrics: Cost of poor quality, Defects per million opportunities and First pass yield. Benefits and costs of Six Sigma.

Unit –V: TQM in the Service Sectors:

Implementation of TQM in service organization: Framework for improving service quality, Model to measure service quality programs. TQM in Health-care services, Hotels and financial services –Banks, Investment Company and Mutual Funds.

Suggested Books:

1. John L. W. Beckford, "Quality: A Critical Introduction", 3rd Ed. Routledge – Taylor and Frances Group, New York and London.
2. Dale H. Besterfield, Carol Besterfield - Michna, Glen H Besterfield and Mary Besterfield-scare, "Total Quality Management", 2006, 3rd Ed. PHI.
3. Ron Basu, "Implementing Quality: A Practical Guide to Tools and Techniques", 2016, THOMPSON.
4. R. P. Mohanty & R. R. Lakhe, "TQM in the Service Sector", Jaico Books. 2016
5. Kanishka Bedi, "Quality Management", Oxford University Press.
6. "The Six Sigma Instructor Guide", Green belt Training made easy, 2008, 2nd Ed. Macmillan
7. Kanji K. Gopal & Asher Mike, "100 methods for TQM", Response.