Course Number and Name
BBA008 - Total Quality Management

Credits and Contact Hours
3 and 45

Course Coordinator's Name
Mr Ramamoorthy

Text Books and References

Text Books:

Reference Books:

Course Description
- To introduce to the student about the basic terms related to quality and concepts of quality management
- To familiarize the student about the basic principles of total quality management
- To acquaint the student with the basic statistical tools used in process control
- To introduce to the student about the various tools used in implementing and checking total quality management

Prerequisites
Professional courses

Co-requisites
NIL
required, elective, or selected elective (as per Table 5-1)

Selected elective

Course Outcomes (COs)
CO1: By understanding about various quality terms, it will be helpful for the student to maintain quality in his/her organization
CO2: The student will be able to formulate new plans/procedures to be implemented to achieve the desired quality status by knowing about the various principles of quality management
CO3: The student will be able to analyze the periodical data in quality control using statistical tools
CO4: The total quality management tools will help the student to understand the procedures in measuring the quality of the organization/process and will also enable him/her to identify the parameters that are improving/depriving the quality
CO5: By knowing about the quality ISO systems, the student will be maintain processes / documentation properly so that the quality maintained by his/her organization gets recognized
CO6: To familiarize the student about the different quality systems used in auditing the quality of a company/industry/organization
List of Topics Covered

UNIT I - INTRODUCTION
Definition of Quality, Dimensions of Quality, Quality Planning, Quality costs – Analysis
Techniques for Quality Costs, Basic concepts of Total Quality Management, Historical Review,
Principles of TQM, Leadership – Concepts, Role of Senior Management, Quality Council,
Quality Statements, Strategic Planning, Deming Philosophy, Barriers to TQM Implementation

UNIT II - TQM PRINCIPLES
Customer satisfaction – Customer Perception of Quality, Customer Complaints, Service
Quality, Customer Retention, Employee Involvement – Motivation, Empowerment, Teams,
Recognition and Reward, Performance Appraisal, Benefits, Continuous Process Improvement
– Juran Trilogy, PDSA Cycle, 5S, Kaizen, Supplier Partnership – Partnering, sourcing, Supplier
Selection, Supplier Rating, Relationship Development, Performance Measures – Basic

UNIT III - STATISTICAL PROCESS CONTROL (SPC)
The seven tools of quality, Statistical Fundamentals – Measures of central Tendency and
Dispersion, Population and Sample, Normal Curve, Control Charts for variables and attributes,
Process capability, Concept of six sigma, New seven Management tools.

UNIT IV - TQM TOOLS
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, and FMEA – Stages of FMEA.

UNIT V - QUALITY SYSTEMS
Need for ISO 9000 and Other Quality Systems, ISO 9000:2000 Quality System – Elements,
Implementation of Quality System, Documentation, Quality Auditing, TS16949, ISO 14000 –
Concept, Requirements and Benefits