

MRD2001 : Total Quality Management

Structure of the course:

Lecture: 3 hrs/ Week Credits: 3

Internal Assessment : 40 Marks

End Semester Examination : 60 Marks

Course objectives:

To provide the students the basic concepts of quality and its relevance in modern world.

To provide the students with the evolution of total quality management

To get in depth idea regarding various problem solving tools

To provide the students with various quality systems.

Course outcome:

After the completion of the course one should be able to know:

- Basic concepts of quality and its relevance
- Cost of poor quality
- Evolution of quality management
- Customer satisfaction and its importance
- Various problem solving tools
- Product development and its importance in modern world
- Various quality standards

Module I

Introduction to the concept of quality – Dimensions of quality-Small ‘q’ & Big ‘Q’-Evolution of TQM- Principles of TQM-Total quality model-TQM wheel- internal and external customer-customer segmentation

Cost of quality - Barriers to TQM Implementation.

Philosophies: Major contributions of Deming, Juran and Crosby to quality management- Juran Trilogy, PDCA Cycle, Kaizen, Kaizen vs. innovation

Module II

TQM Principles-Customer satisfaction – Customer Perception of Quality -Customer Complaints, Service Quality, Customer Retention, Employee involvement – Motivation

Quality planning: SWOT analysis-Strategic planning- Customer orientation: Customer focus-customer satisfaction model-customer retention

Product development process- Tools for effective product development- Quality Function Deployment.

Module III

Problem solving process: Steps involved in problem solving-Quality control tools: Brain storming-Histograms-Check sheets- Pareto diagram-Ishikawa diagram-Control charts-Scatter diagram.

Continuous improvement strategies: Deming wheel-Zero defect concept- Six sigma approach – Quality circles- Benchmarking
Quality standards – Need of standardization - ISO 9000 series – ISO 14000 series – Other contemporary standards.

REFERENCES

1. Dale H.Besterfield, et al., “Total Quality Management”, Pearson Education, Inc. 2003. (Indian reprint 2004). ISBN 81-297-0260-6.
- 2 L .Suganthi and Anand A Samuel :Total Quality Management, Prentice Hall of India New Delhi.
3. K Sridhara Bhat :Total Quality Management , Text and cases. Himalaya Publishing House.
4. James R.Evans & William M.Lindsay, “The Management and Control of Quality”, (5th Edition), South-Western (Thomson Learning), 2002 (ISBN 0-324-06680-5).
5. Feigenbaum.A.V. “Total Quality Management”, McGraw-Hill, 1991.
6. Oakland.J.S. “Total Quality Management”, Butterworth Heinemann Ltd., Oxford, 1989.
7. Narayana V. and Sreenivasan, N.S. “Quality Management – Concepts and Tasks”, New Age International 1996.
8. Zeiri. “Total Quality Management for Engineers”, Wood Head Publishers, 1991

Structure of the Question paper

For the End Semester Examination the question paper will consist of three questions from each module out of which two questions are to be answered by the students