

## **GE8077 TOTAL QUALITY MANAGEMENT**

### DETAILED SYLLABUS

#### **OBJECTIVE:**

- To facilitate the understanding of Quality Management principles and process.

#### **UNIT I INTRODUCTION**

Introduction - Need for quality - Evolution of quality - Definitions of quality - Dimensions of product and service quality - Basic concepts of TQM - TQM Framework - Contributions of Deming, Juran and Crosby - Barriers to TQM - Customer focus - Customer orientation, Customer satisfaction, Customer complaints, Customer retention.

#### **UNIT II TQM PRINCIPLES**

Leadership - Quality Statements, Strategic quality planning, Quality Councils - Employee involvement - Motivation, Empowerment, Team and Teamwork, Recognition and Reward, Performance appraisal - Continuous process improvement - PDCA cycle, 5S, Kaizen - Supplier partnership - Partnering, Supplier selection, Supplier Rating.

#### **UNIT III TQM TOOLS AND TECHNIQUES - I**

The seven traditional tools of quality - New management tools - Six sigma: Concepts, Methodology, applications to manufacturing, service sector including IT - Bench marking - Reason to bench mark, Bench marking process - FMEA - Stages, Types.

#### **UNIT IV TQM TOOLS AND TECHNIQUES II**

Quality Circles - Cost of Quality - Quality Function Deployment (QFD) - Taguchi quality loss function - TPM - Concepts, improvement needs - Performance measures.

#### **UNIT V QUALITY MANAGEMENT SYSTEM**

Introduction—Benefits of ISO Registration—ISO 9000 Series of Standards—Sector-Specific Standards—AS 9100, TS16949 and TL 9000-- ISO 9001 Requirements—Implementation—Documentation—Internal Audits—Registration--ENVIRONMENTAL MANAGEMENT SYSTEM: Introduction—ISO 14000 Series Standards—Concepts of ISO 14001—Requirements of ISO 14001— Benefits of EMS.

#### **TEXT BOOK:**

1. Dale H. Besterfield, Carol B. Michna, Glen H. Besterfield, Mary B. Sacre, Hemant Urdhwareshe and Rashmi Urdhwareshe, "Total Quality Management", Pearson Education Asia, Revised Third Edition, Indian Reprint, Sixth Impression, 2013.

#### **REFERENCES:**

1. James R. Evans and William M. Lindsay, "The Management and Control of Quality", 8th Edition, First Indian Edition, Cengage Learning, 2012.

Diploma, Anna Univ UG & PG Courses

*Notes*  
*Syllabus*  
*Question Papers*  
*Results and Many more...*

Available @

[www.AllAbtEngg.com](http://www.AllAbtEngg.com)

2. Janakiraman. B and Gopal. R.K., "Total Quality Management - Text and Cases", Prentice Hall (India) Pvt. Ltd., 2006.
3. Suganthi. L and Anand Samuel, "Total Quality Management", Prentice Hall (India) Pvt. Ltd., 2006.
4. ISO9001-2015 standards