**REG.NO:**

**SEMBODAI RUKMANI VARATHARAJAN ENGINEERING COLLEGE**

**ACADEMIC YEAR 2013-2014/ODD SEMESTER**

**MODEL EXAM**

**DEPARTMENT OF MECHANICAL ENGINEERING**

**SUBJECT CODE/TITLE:** MG1301 TOTAL QUALITY MANAGEMENT

**YEAR/SEM:** IV/VII **DATE:**

**DURATION:** 1 ½ HOURS **MAX.MARKS:** 50

**Answer ALL the Questions**

**PART A (10X2=20)**

1. What do you mean by total cost of quality?
2. What do you understand by quality statement?
3. Explain: Empowerment?
4. List out various measurements of dispersion in SPC?
5. Define Kaizen.
6. List down the pillars of TPM?
7. Explain: Taguchi Quality Loss Function?
8. Explain about NCR?
9. How is FMEA performed?
10. Explain the need for the quality systems in an organization?

**PART B (80 MARKS)**

1. i) List out the barriers of TPM implementation and explain? (8)

ii) Explain about the strategic planning? (8)

(or)

1. Define quality. Explain the fourteen steps of Deming’s philosophy for improving quality, productivity and competitiveness. (16)
2. Explain the following

(i) 5S (5)

(ii) Kaizen (5)

(iii) Supplier rating and relationship diagram (6)

(or)

1. i) Explain about PDSA cycle with their advantages and limitations. (8)

ii) Explain Juran’s Quality Trilogy in detail. (8)

1. Discuss the need, construction and applications of control charts for variables. (16)

(or)

1. (i)Draw cause and effect diagram for an engineering problem. (8)
(ii) What are the interpretations of different shapes of histograms? (8)
2. Draw the house of quality for an industrial product. Explain various stages (16)

(or)

1. Discuss the objectives, process, outcome and benefits of FMEA? (16)
2. (i) Explain about quality system auditing? (8)

(ii) Discuss the implementation of ISO:9000:2000 quality systems?(8)

(or)

1. (i) Discuss the environmental management system model with a block diagram. (10)
(ii) What are the global benefits of environmental management system? Discuss-in detail.(6)