

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(ME) (2012 Onwards E-II) (Sem.-7,8)**

**TOTAL QUALITY MANAGEMENT**

**Subject Code : DE/ME-2.5**

**M.Code : 72011**

**Time : 3 Hrs.**

**Max. Marks : 60**

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**1. Answer briefly :**

- a) Mention **any four** principles of TQM.
- b) PDSA cycle.
- c) Total Quality Control.
- d) List five benefits that can be realized by implementing an ISO 9000 quality system.
- e) What is acceptance sampling?
- f) Taguchi's quality loss function.
- g) Techniques of Data collection from market.
- h) What is employee empowerment?
- i) List the different types of control charts.
- j) Define the terms - Factor, Response and Treatment in the context of Design of Experiments.

## SECTION-B

2. You recently rendered a performance report on one of your employees. The employee is not happy with the evaluation and has asked for an appointment to discuss the evaluation process. Discuss the following :
  - a) The purpose of the performance evaluation
  - b) The evaluation criteria
  - c) The employee's options regarding the evaluation
3. What is customer retention? Discuss in brief the procedure for handling customer complaints?
4. List the fourteen principles of Deming's approach
5. Write the basic principles of QFD. Differentiate between OFD for manufacture and service industries.
6. How will you define a quality circle? What are its composition and functions?

## SECTION-C

7.
  - a) List the various tools that can be utilized for problem solving and situation analysis in the realm of TQM. Which of these tools are quantitative?
  - b) Efficiency has been defined as "Doing things better" and effectiveness as "Doing better things". Describe how benchmarking can be used to improve both efficiency and effectiveness.
8. Explain the following :
  - a) Origin of ISO 9000
  - b) Elements of ISO 9001
9. Define JIT. Explain in detail the basic steps for the implementation of JIT. Also discuss the equipment layout for JIT system.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**