# USN

## Seventh Semester B.E. Degree Examination, January 2013 **Total Quality Management**

Max. Marks: 100 Time: 3 hrs.

## Note: Answer FIVE full questions, selecting at least TWO questions from each part.

### PART - A

| 1 | a. | List the six basic concepts, | which are the requirements of total quality management. |
|---|----|------------------------------|---|
|   |    |                              | (06 Marks)  |

(05 Marks) b. List the nine dimensions of quality.

(09 Marks) Which are the obstacles to implement TQM in an organization? Briefly explain.

Briefly discuss any five points of the Deming philosophy. (05 Marks) 2 a.

(05 Marks) What is PDSA cycle? Briefly explain. b.

With reference to Juran Trilogy, briefly explain the improvement part. (05 Marks) c.

What is Taguchi's loss function? Briefly explain with an example. (05 Marks)

Briefly discuss the characteristics of quality leaders. (08 Marks)

What is a quality policy statement? Briefly explain. (04 Marks)

ii) Mission statement. With examples, elaborate the significance of, i) Vision statement (08 Marks)

Write short notes on: a.

i) W-V model of continuous improvement.

(10 Marks) ii) Seven-steps of reactive improvement.

b. How do you apply proactive improvement to develop new products? Briefly discuss.

(10 Marks)

#### PART - B

- What is bench marking? Mention the 6 steps that contain the core-techniques of bench 5 a. (06 Marks) marking.
  - (10 Marks) Write short notes on: i) Kaizen ii) Six-sigma. b.
  - What is Re-engineering? Briefly explain.

(04 Marks)

Briefly discuss the significance of quality function deployment. 6 a.

(06 Marks)

Discuss the rationale for implementation of quality by design. Enumerate the benefits. b.

(08 Marks)

Discuss the 4 stages of FMEA (Failure mode effect analysis). (06 Marks)

What are the benefits of ISO registration? 7 a.

(05 Marks)

ISO9000 series of standards ii) ISO-14000 Write short note on (any two): i) b.

(10 Marks) iii) TS-16959.

Briefly discuss the requirements of ISO-9001.

(05 Marks)

- With reference to product acceptance control discuss: 8
  - a. Stages of AQL sampling.
  - b. Critical defect.
  - c. Attribute sampling-requirements
  - IS-2500 (part I)/ISO 2859 sampling procedures for inspection by attributes packages.

(20 Marks)