



B.Tech III Year II Semester (R13) Regular & Supplementary Examinations May/June 2017 TOTAL QUALITY MANAGEMENT

(Mechanical Engineering)

Time: 3 hours

1

Max. Marks: 70

PART – A (Compulsory Question)

(Compulsory Quest

- Answer the following: $(10 \times 02 = 20 \text{ Marks})$
 - (a) Define quality cost. Mention four categories of quality cost.
 - (b) Mention any four principles of TQM.
 - (c) Name the 5's (five's) in TQM.
 - (d) Define kaizen.
 - (e) Mention the measures of central tendency and dispersion.
 - (f) What are the advantages of process chart?
 - (g) Define bench marking.
 - (h) What does Deming cycle stand for?
 - (i) What are the advantages of reengineering?
 - (j) What is DPMO on six sigma project?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Write fourteen steps of Deming's philosophy for improving quality, productivity and competitiveness.

OR

3 Discuss about the basic concepts and the three elements of TQM.

UNIT – IL

- 4 Explain about quality measuring system with suitable case study.
 - OR
- 5 Explain any two total quality management tools with example.

UNIT – III

6 Explain in detail about the FMEA procedure.

OR

7 Briefly explain the structure of a quality circle.

UNIT – IV

- 8 Explain the Taguchi's Quality Loss Function.
- 9 Explain about Poka-Yoke with suitable case study.

UNIT – V

10 Compare the two important approaches in six sigma.

OR

11 Discuss about the elements of supply chain management.
