

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – VIII SEMESTER EXAMINATION- WINTER 2018**Subject Code: 2181920****Date: 19-11-2018****Subject Name: Quality Engineering****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Write three definitions of Quality as given by the quality gurus. **03**
(b) Explain Quality Dimensions of manufacturing sectors. **04**
(c) Explain fundamental factors affecting quality (9 M's). **07**
- Q.2** (a) What is Kaizen? Explain with example. **03**
(b) Explain Poka-Yoke with two examples. **04**
(c) Explain 7 QC tools. **07**
- OR**
- (c) Explain 7 New Quality Management Tools. **07**
- Q.3** (a) What is concurrent engineering? **03**
(b) Explain the barriers in implementing TQM. **04**
(c) Explain Quality Management Standards – ISO: 9000. **07**
- OR**
- Q.3** (a) Write Taguchi's contribution in quality engineering. **03**
(b) Explain the implementation requirement of TQM. **04**
(c) Write a short note on ISO: 14000. **07**
- Q.4** (a) Write application of FMEA **03**
(b) Write two methodologies of Six Sigma. **04**
(c) Write a short note on QFD. **07**
- OR**
- Q.4** (a) Write the limitation of six sigma. **03**
(b) Write the steps in experimental design in DOE. **04**
(c) Write a short note on FMEA. **07**
- Q.5** (a) Define (1) JIT, (2) TPM and (3) BPR **03**
(b) Write a note on Agile manufacturing. **04**
(c) Write a short note on World Class Manufacturing. **07**
- OR**
- Q.5** (a) Define Six sigma with one example. **03**
(b) Explain characteristics of Quality in Service Sectors. **04**
(c) Write a short note on Quality Dimensions in Service Sectors. **07**
