

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER- VII • EXAMINATION – SUMMER 2018**

**Subject Code:171906****Date: 28-04-2018****Subject Name: Quality and Reliability 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 Short note on Total Quality Control. **07**  
(b) Write Short note on Fault Tree Analysis. **07**
- Q.2** (a) Explains steps in experimental design. **07**  
(b) Explain KANBAN system. **07**
- OR**
- (b) Why is it seen Quality as winning strategy? Explain **07**
- Q.3** (a) Write methods and advantages of TPM. **07**  
(b) Discuss implementation barriers of ISO 9000. **07**
- OR**
- Q.3** (a) Discuss benefits of QS 9000. **07**  
(b) Explain theory of Random samples. **07**
- Q.4** (a) Write Short note on Cost Of Quality. **07**  
(b) Write Short note on Business process Re-engineering. **07**
- OR**
- Q.4** (a) Write Short note on Lean manufacturing. **07**  
(b) Write Short note on concurrent engineering. **07**
- Q.5** (a) Explain conditional probability. **07**  
(b) Explain concept of burn in period. **07**
- OR**
- Q.5** (a) Define MTTF, MTBF and MTTR. **07**  
(b) Write Short note on Failure data analysis. **07**

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