

Roll No.

24481

B. Tech. 7th Semester (ME)

Examination – June, 2016

QUALITY ENGINEERING

Paper : ME-417-F

Time : Three Hours] [Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all. Question No. 1 is *compulsory* and attempt at least *one* question from each Section. All questions carry equal marks.

1. Explain the following : 4 × 5 = 20

- (a) Fitness for use and its parameters.
- (b) Specification limits.
- (c) QFD.
- (d) Affinity diagrams.

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SECTION - A

2. Discuss in detail the concept of cost of quality. 20
3. Describe the following problem solving techniques with suitable examples : 1. Pareto diagram 2. Cause and Effect diagram. 20

SECTION - B

4. Explain in detail the various statistical tools in Quality control. 20
5. Explain p, np, c and u control charts in detail with suitable examples. 20

SECTION - C

6. What do you mean by acceptance sampling plan. Explain sequential sampling plans in detail with suitable example. 20
7. Explain Poission and Normal distribution with practical examples. 20

SECTION - D

8. What is QFD ? What are benefit and difficulties associated with QFD ? Discuss methodology to implement to QFD. 20

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9. (a) What is TPM ? Explain the objectives and benefits of implementing TPM in an industry. 10
- (b) Write principles of TQM by Juran. 10

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