

**SECTION - A**

- 2. Define and explain the objectives of quality control. 15
- 3. Explain in brief : 15
  - (a) Role of feedback in quality control
  - (b) Quality function

**SECTION - B**

- 4. Compute the average and the standard deviation of the following distribution which shows the result of distribution of resistance of 500 unit of electrical product : 15

Resistance Ohms	Frequency
2.7 - 2.9	02
3.0 - 3.2	16
3.3 - 3.5	46
3.6 - 3.8	88
3.9 - 4.1	138
4.2 - 4.4	113
4.5 - 4.7	71
4.8 - 5.0	22
5.1 - 5.3	04

- 5. Explain how you will find out the probability of obtaining  $x$  defectives in a sample of  $n$  items by using Hypergeometric distribution. 15

**SECTION - C**

- 6. Describe briefly the ISO : 9000 series standard in general. 15
- 7. Describe the various steps necessary for obtaining ISO : 9000 standard registration. 15

**SECTION - D**

- 8. Give various definition of TQM and explain Juran's ten steps to quality improvement. 15
- 9. Discuss and explain the concept of Parameter Design and Robust Design according to Taguchi philosophy. 15

Roll No. ....

**3711**

**B. Tech, 8th Semester (Computer Science  
& Engg.) Examination – May, 2023**

**QUALITY ENGINEERING**

**Paper : PEC-ME-410-G**

*Time : Three hours ]*

*[ Maximum Marks : 75*

*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, selecting one question from each Section. Question No. 1 is compulsory. All questions carry equal marks.*

1. (a) Explain Quality Traits.
- (b) Elements of TQC.
- (c) Discuss Poisson Distribution.
- (d) Discuss Industrial Inspection.
- (e) Explain TQM philosophies.
- (f) Discuss about importance of quality in industry.

2.5 × 6 = 15

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P. T. O.