

**22624**

**M.Tech. 2nd Semester (MAE) CBCS Scheme Elective-I  
Examination, May-2017**

**QUALITY CONTROL TECHNIQUES**

**Paper-MTMA22D1**

*Time allowed : 3 hours ] [ Maximum marks : 100*

*Note : Attempt five questions in all. Question No. 1 is compulsory. Attempt one question from each unit.*

1. Describe the following :
  - (a) Fixation of Control limits 5
  - (b) Trial of Control limits 5
  - (c) Varying Control limits 5
  - (d) Quality level. 5

**Unit-I**

2. Describe the Type I and Type II errors, with the help of suitable example. 20
3. What variation occurs while making a control chart during performance evaluations. 20

**Unit-II**

4. Explain the upper and lower specification limits and control limits in quality control techniques. 20
5. What are the methods of grouping or sub grouping and control chart parameters. 20

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**Unit-III**

6. Explain the ARL and the cumulative sum and varying control limits. 20
7. Explain control charts for attributes P, chart, N, chart. in detail. 20

**Unit-IV**

8. (a) What are the curves occur while making the readings? 10
- (b) Explain acceptance sampling. 10
9. Explain the following :
- (a) AOQ 10
- (b) AOQL. 10

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