

**22110**

**M. Tech. 3rd Semester (M.E.) Examination,**

**December-2018**

**MACHINE DESIGN**

**Paper-M-849**

**Total Quality Management**

*Time allowed : 3 hours]*

*[Maximum marks : 100*

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*Note : Attempt any five questions in total.*

1. Explain the following terms :
  - (a) Characteristics of Quality Leader
  - (b) Role of TQM leaders. 10,10
2. What are the role of Unions and employee involvement in the customer satisfaction ? 20
3. What do you mean by Bench mark ? Explain in detail with their Metrics, Model, Process, Partner, Objective, Merit and Demerit. 20
4. Explain the PDSA cycle in detail. 20
5. What is the procedure for ISO 9000 certification and what is the difference between ISO9001, ISO9002 and ISO9003. 20

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6. What is Process Capability ? Why it has been done in the manufacturing industry ? Also discuss the merit and demerit of this. 20
7. Explain the role of Information Technology for the growth of the industry. 20
8. Explain the steps involved to perform the F-Test. 20

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