

Sub Code: MST-332

ROLL NO.

Model Question Paper

COURSE: M.TECH.

BRANCH: MECHANICAL ENGINEERING

SEMESTER: 1.

SUBJECT: Quality Management

Duration: 3:00 hrs

Max marks: 100

Note: Attempt all questions.

1. Attempt any four parts of the following.

5x4 = 20

- A. Explain the obstacle associated with TQM implementation.
- B. Explain the objectives of TQM.
- C. Differentiate between MTTR and MTTF.
- D. What is the difference between reliability and maintainability?
- E. State the significance of the quality circle.
- F. Explain MRPI and MRPII.

2. Attempt any two parts of the following.

10x2=20

- A. Explain the Organizational structure for TQM implementation with the help of suitable block diagram.
- B. What are the dimensions of quality? Discuss them.
- C. Where did the concept of quality circles come from? Trace its history in India.

3. Attempt any two parts of the following.

10x2=20

- A. What are Control charts? Discuss the application of various Control Charts .Write down its advantage and disadvantage.
- B. Explain the construction and analysis of the C chart.
- C. Explain the cause of apparatus error and corrective methods in detail.

4. Attempt any two parts of the following.

10x2=20

- A. Explain the objective and steps of Taguchi Method. What are the factors to be considered in choosing an organization structure for different product
- B. Define reliability. What are the factors that affect it? What approaches are generally adopted for evaluating the reliability of products?
- C. List and explain the various measures of performance in evaluating the success of an organization.

5. Attempt any two parts of the following.

10x2=20

- A. What are the various quality-documentation requirements for ISO 9000 certification?
- B. Explain the benefits of ISO certification and define the quality policy statement.
- C. Compare and contrast JIT and MRP. Which one of these is more suited to Indian companies? Give suitable examples in support of your answer.