



# CBCS SCHEME

21ME732

## Seventh Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025 Total Quality Management

Time: 3 hrs.

Max. Marks: 100

**Note:** Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Define total quality management and describe the basic approach of TQM. (10 Marks)  
b. Describe TQM framework with neat schematic representation. (10 Marks)

OR

- 2 a. Explain the contributions of following Gurus of TQM.  
i) Walter A. Shewart ii) Joseph Juran. (10 Marks)  
b. Enumerate the process in the documentation of ISO 9000. (10 Marks)

### Module-2

- 3 a. List Deming's 14 principles and describe any two principles. (10 Marks)  
b. Enumerate the characteristics of successful leader. (10 Marks)

OR

- 4 a. Describe the role of TQM leaders. (10 Marks)  
b. Explain the steps in decision making process. (10 Marks)

### Module-3

- 5 a. Illustrate the customer perception of quality. (10 Marks)  
b. Analyse any four methods of collecting voice of customers. (10 Marks)

OR

- 6 a. Describe the Maslow's Hierarchy of needs. (10 Marks)  
b. Illustrate KANO model, that helps in translating needs into requirements with neat sketch. (10 Marks)

### Module-4

- 7 a. Describe Juran Trilogy for quality improvement. (10 Marks)  
b. Explain six sigma concept for continuous quality improvement. (10 Marks)

OR

- 8 a. Interpret the 4 different methods of improvement straggles used for continuous improvement in TQM. (10 Marks)  
b. Illustrate the following with a neat sketch : i) Histogram ii) Pareto diagram. (10 Marks)

### Module-5

- 9 a. Describe 8 pillars related to TPM. (10 Marks)  
b. Illustrate the concept of '5s' foundation applied to TPM. (10 Marks)

OR

- 10 a. Enumerate the types of maintenance in TPM. (10 Marks)  
b. Illustrate the benefits and challenges of Quality by Design (QbD). (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.