

CBCS SCHEME

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BME613A

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2025

Total Quality Management

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1				M	L	C
Q.1	a.	Define TQM. Explain the basic approach and benefits of TQM with examples.	10	L1 L2	CO1	
	b.	Discuss the contribution of TQM gurus in the development of total quality management.	10	L2	CO1	
OR						
Q.2	a.	Explain the TQM Framework and obstacles faced during its implementation.	10	L3	CO1	
	b.	Describe the ISO 9000series of standards. How do ISO 9001 requirements help organizations?	10	L5	CO1	
Module – 2						
Q.3	a.	What are characteristics of quality leaders? Explain leadership concepts and the importance of ethics.	10	L1	CO2	
	b.	Illustrate the Deming philosophy and its significance in TQM leadership.	10	L4	CO2	
OR						
Q.4	a.	Discuss the role of TQM leaders in strategic planning and communication with examples.	10	L3	CO2	
	b.	Explain how core values and decision-making affect leadership in a quality-oriented organization.	10	L5	CO2	
Module – 3						
Q.5	a.	Define customer satisfaction. How does service quality and customer perception impact it?	10	L1	CO3	
	b.	Discuss customer complaints and retention strategies in maintaining quality.	10	L4	CO3	
OR						
Q.6	a.	Explain employee involvement through motivation, empowerment and performance appraisal.	10	L5	CO3	
	b.	Describe the importance of recognition, rewards and union participation in TQM.	10	L2	CO3	

Module – 4

Q.7	a.	Explain the Juran Trilogy and how it supports continuous improvement in quality.	10	L2	CO4
	b.	What is the PDSA cycle? Describe with a suitable example.	10	L1 L2	CO4

OR

Q.8	a.	Write a detailed note on statistical process control tools used in quality management.	10	L2	CO4
	b.	Discuss the concept of six sigma and its role in improving process efficiency.	10	L1 L5	CO4

Module – 5

Q.9	a.	Define TPM. Explain the different types of maintenance and the steps in implementing TPM.	10	L1	CO5
	b.	Describe the five pillar of TPM and the role of jishu Hozen in quality improvements.	10	L2	CO5

OR

Q.10	a.	Explain the concept of Quality by Design (QbD) and its key components in the pharmaceutical industry.	10	L3	CO5
	b.	What is an Environmental Management System [EMS]? Discuss its benefits and challenges.	10	L5	CO5

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