

21 NOV 2025 TE CHEMICAL (SEM-V) C SCHEME TQM QP CODE: 10093202

Time: 3 Hours

Marks 80

- N.B. 1 Question number ONE is compulsory  
2 Attempt any THREE questions out of remaining FIVE  
3 Figure to right indicate full marks
01. Answer the following (any four) **20**
- (a) Describe trade-off between quality and cost
  - (b) Discuss about supply chain management and its relevance in TQM, highlight the types key elements and major task
  - (c) State the primary objectives of six sigma?
  - (d) What is bench-marking? What are its benefits?
  - (e) Write short notes on p chart of process control chart attribute
02. (a) Explain the approach and barriers in implementation of TQM **10**  
(b) Explain on Juran's ten steps to quality improvement **10**
03. (a) What is an OC curve? Explain its significance **10**  
(b) What is customer, user and consumer? Describe in detail various types of customers. **10**
04. (a) What is product life cycle? Explain in detail the product life cycle. **10**  
(b) Explain the approach for vendor evaluation and vendor selection in TQM **10**
05. (a) Explain management of controllable defects and operator controllable defects in quality improvement **10**  
(b) What are the benefits of ISO 9000 certification? How does it help in quality improvement? Describe the requirement of ISO 9000 certification **10**
06. (a) Explain the strategic planning for quality improvement with examples **10**  
(b) What are the requirements of Failure Mode and effect analysis? Cite the purpose, reliability and the process of FMEA **10**

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