**Question Paper Code: 91505**

Sixth/Seventh/Eighth Semester
Civil Engineering
GE 2022/GE 607/GE 71/IE 72/10177 GE 004/10144 GE 004/10177 GE 701/10144 CSE 44 — TOTAL QUALITY MANAGEMENT
(Common to All Branches)
(Regulation 2008/2010)
(Also common to PTGE 2022/10177 GE 004/10144 GE 004/10144 CSE 44 — Total Quality Management for B.E. (Part-Time) Fifth/Sixth/Seventh Semester Civil Engineering, ECE, CSE, EEE and Mechanical Engineering — Regulation 2009/2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

**PART A — (10 × 2 = 20 marks)**

1. What are the advantages of implementing TQM in a manufacturing organization?
2. What are the elements of TQM?
3. What is meant by customer retention?
4. What is supplier partnering?
5. What is the use of prioritization matrices?
6. What is a scatter diagram?
7. State the significance of quality circles.
8. What performance measures would you suggest for airline passenger service?
9. Explain briefly the Environmental Management System.
10. What is QS 9000 standard?
PART B — (5 × 16 = 80 marks)

11. (a) (i) What is service quality? Explain its various elements towards customer satisfaction. (10)
(ii) What are the obstacles to TQM implementation? Explain. (6)

Or

(b) Describe the Deming’s fourteen points for the improvement of quality management. (16)

12. (a) (i) Discuss about the three quality statements, giving an example for each. (6)
(ii) What are the benefits of employee involvement? (6)
(iii) Explain briefly how employee empowerment relate to employee involvement. (4)

Or

(b) (i) What is a Team? List the characteristics of a successful team. (10)
(ii) What are the factors that KAIZEN focusses for continuous improvement? (6)

13. (a) (i) Six sigma concept can be applied to non manufacturing processes. Do you agree with this statement? Justify your answer with a suitable example. (10)
(ii) Illustrate the Cause and Effect diagram with a simple example. (6)

Or

(b) (i) What is a Tree diagram? How is it useful for quality management? (10)
(ii) What is a critical success factor? How is it important in bench marking? (6)

14. (a) Explain quality function deployment with an example. (16)

Or

(b) (i) List and explain the various measures of performance in evaluating the success of an organization. (10)
(ii) Discuss the need for Taguchi’s quality loss function. (6)

15. (a) (i) Discuss about the four important documents to be prepared for ISO 9000 certification. (10)
(ii) What are benefits of implementing ISO 14000 standard? (6)

Or

(b) Discuss the various elements of ISO 9000:2000 quality system. (16)