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Question Paper Code : 71637

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2015.

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. Define 'Quality' and 'Total Quality Management'.
2. What are barriers to implement TQM?
3. What do you understand by "Supplier rating"?
4. List the benefits of team work.
5. Mention any four traditional tools of quality.
6. What are the reasons for bench-marking?
7. Define "Taguchi's Quality Loss Function" (TQLF).
8. Indicate the different parameters used for quality performance measurement.
9. List the various clauses of ISO 9000-2000 standard.
10. Compare QS 9000 with TS 16949 quality system.



PART B — (5 × 16 = 80 marks)

11. (a) Describe Deming's philosophy for quality improvement.

Or

- (b) Elaborate on TQM frame work and importance of each element.

12. (a) Discuss the importance of "employee involvement" and "motivation" for enhancing quality.

Or

- (b) Explain the issues related to customer's complaints and retention.

13. (a) Prepare a FMEA work sheet for an induction motor's shaft failure or a failure of your choice.

Or

- (b) Develop procedure for implementation of SIX sigma in a manufacturing organisation.

14. (a) Draw the house of quality for a product of your choice and describe the QFD methodology.

Or

- (b) Explain the pillars of TPM and its benefits.

15. (a) (i) What are the need for documentation in Quality Management System? (4)
(ii) Write a brief note on Quality Auditing in QMS. (4)
(iii) Discuss the various elements of QMS. (8)

Or

- (b) Explain an features of ISO 14000 and procedure to obtain ISO 14000 certification.