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Question Paper Code: 53130

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2019.

Sixth/Seventh/Eighth Semester

Civil Engineering

GE 6757 — TOTAL QUALITY MANAGEMENT

(Common to: B.E. Aeronautical Engineering/Automobile Engineering/Biomedical Engineering/Civil Engineering/Computer Science and Engineering/Electrical and Electronics Engineering/Electronics and communication Engineering/Electronics and Instrumentation Engineering/
Environmental Engineering/Industrial Engineering / Industrial Engineering and Management/Instrumentation and Control Engineering/Manufacturing Engineering/Materials Science and Engineering/Mechanical

Engineering/Mechanical and Automation Engineering/
Mechatronics Engineering/Medical Electronics/Petrochemical Engineering/Production Engineering/Chemical Engineering/Fashion Technology/Food Technology/Information Technology/Petrochemical Technology/Petroleum Engineering/Pharmaceutical Technology/Plastic Technology/B.Tech. Polymer Technology)

(Regulation 2013)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. Define Quality as per Crosby.
- 2. List down the contributions of Juran's.
- 3. What is Employee Empowerment?
- 4. Name a few barriers of Team Performing.
- 5. Give the seven tools of quality.
- 6. What is Six Sigma Problem Solving Method?
- 7. Define "Taguchi's Quality Loss Function" (TQLF).
- 8. What are the criteria to evaluate the performance measures?

- 9. What are the four elements for the planning of ISO 14001?
- 10. Define Quality Audits.

PART B —
$$(5 \times 13 = 65 \text{ marks})$$

11. (a) Explain the basic concepts of TQM.

Or

- (b) What are the barriers to "TQM Implementation"?
- 12. (a) Explain the step by step procedure in Strategic Quality Planning.

Or

- (b) (i) Briefly explain about Recognition and Reward System along with its effects.
 - (ii) Discuss the function of Quality Council.
- 13. (a) List out the seven new management tools. Explain them briefly.

Or

- (b) Explain in detail about typical benchmarking methodology.
- 14. (a) Explain about QFD Process.

Or

- (b) Describe the concepts of TPM. List out the steps for TPM Development.
- 15. (a) Discuss the importance of ISO 9000.

Or

(b) Explain about the Obstacles to Implementation of TQM.

PART C —
$$(1 \times 15 = 15 \text{ marks})$$

16. (a) Explain about Deming's Philosophy.

Or

(b) Quality management is only applicable to firms in the manufacturing sector and not in the public or service industry. Give argument for or against this assertion and discuss the dimension of service Quality.