Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 60637

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

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)

(Regulations 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 – Regulations 2009/2010)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List two basic needs of Quality.

2. What are the barriers to TQM?

3. Define Quality Planning.

4. How do you assess the performance of a Team?

5. List any two reasons for bench marking.

6. Define the term Six-Sigma in TQM.

7. What are uses of FMEA?

8. State any two reasons for Quality measure.

9. Give your view on ISO 9000-2000 Quality system.

10. How do you audit the Quality in TQM?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Describe the Deming's 14 points for top management in TQM. (8)

(ii) Explain the dimensions of manufacturing and service quality with suitable examples. (8)

Or

(b) Explain the contributions of Juran and Crosby to total quality management. (16)

12. (a) Explain the following with an example.

(i) Continuous process improvement (8)

(ii) Performance appraisal. (8)

Or

(b) (i) Explain the two ways of Kaizen implementation. (8)

(ii) Describe the PDSA cycle in detail. (8)

13. (a) (i) Elaborate any five traditional tools of quality in TQM. (8)

(ii) State and explain the Six Sigma Concepts. (8)

Or

(b) Explore the various reasons to bench mark and its failures in bench marking. (16)

14. (a) Derive the expressions and explain the Taguchi loss function with neat graph. (16)

Or

(b) Explain the concept of QFD. (16)

15. (a) (i) Describe the process of documentation and quality auditing in ISO 9000:2000 quality system. (8)

(ii) Explain the various needs of ISO 14000. (8)

Or

(b) Describe the TQM implementation in manufacturing and service sectors with suitable example. (16)

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