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Question Paper Code : 11184

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2014.

Eighth Semester

Mechanical Engineering

080120066 — TOTAL QUALITY MANAGEMENT

(Regulation 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions

PART A — (10 × 2 = 20 marks)

1. Define Quality as per Ed. Deming.
2. What do you understand by quality statement?
3. Write a note on Supplier selection.
4. What is Empowerment?
5. Draw the different types of histograms.
6. What are the reasons to benchmark?
7. List out various measurements of dispersion in SPC.
8. Name the three common quality loss functions in Taguchi's method?
9. What is the purpose of ISO 9000 quality system?
10. How does the conceptual approach to ISO 14000 differ from ISO 9000?

PART B — (5 × 16 = 80 marks)

11. (a) Enumerate Deming's 14 points philosophy of management. (16)

Or

- (b) (i) What are the dimensions of quality? Discuss eight of them. (8)
- (ii) What are the barriers to TQM implementation? How are they eliminated? (8)

12. (a) Explain the following :

- (i) 5S (5)
- (ii) Motivation (5)
- (iii) Supplier rating and relationship diagram (6)

Or

- (b) (i) What are the types of teams formed in industries? Discuss the functions of any four of them. (8)
- (ii) How is PDCA cycle used? Discuss with a case study. (8)

13. (a) Explain in detail :

- (i) Sketch the general design of FMEA form. (8)
- (ii) Six sigma. (8)

Or

- (b) (i) Discuss the applications of new 7 management tools. (8)
- (ii) Briefly explain the process of benchmarking. (8)

14. (a) Explain in detail :

- (i) TPM (8)
- (ii) Cost of quality. (8)

Or

- (b) (i) List out the step by step procedure to build the house of quality with suitable Example. (12)
- (ii) Briefly explain the benefits of QFD. (4)

15. (a) (i) Explain about the documentation process in ISO 9000:2000 systems. (8)

- (ii) Discuss ISO 14000 requirements and its benefits. (8)

Or

- (b) List the different types of quality audits available in practice and explain when each has to be carried out. (16)