Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

Question Paper Code : 41320

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Eighth Semester

Electronics and Communication Engineering

MG 1301 – TOTAL QUALITY MANAGEMENT

(Common to Biotechnology, Chemical Engineering, Textile Technology, Seventh Semester – Aeronautical Engineering, Automobile Engineering, Biomedical Engineering, Civil Engineering, Computer Science and Engineering, Mechanical Engineering, Production Engineering, Sixth Semester – Information Technology and Fifth Semester – Electrical and Electronics Engineering, Electronics and Instrumentation Engineering and Instrumentation and Control Engineering)

(Regulation 2008)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is a Quality Statement?

2. Why are quantitative data necessary for quality improvement?

3. Why are the organization increasingly using customer satisfaction as a measure of quality?

4. What is the importance of customer retention?

5. What are the outputs from a Pareto diagram?

6. What are the measures of central tendency?

7. Why is benchmarking becoming an increasingly popular tool?

8. What are the benefits of Failure mode and effect analysis (FMEA)?

9. What are the internal benefits to an organisation implementing ISO 9000?

10. Define quality Audit? Give an example.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Why is TQM considered as everyone's responsibility? What measures are taken to involve everyone in the organisation? (8)

    (ii) What are the quality costs? Discuss them in detail. (8)

Or

    (b) (i) Discuss the principles of TQM in detail. (8)

    (ii) What are the barriers to TQM implementation? How are they overcome? (8)

12. (a) (i) Draw the customers satisfaction organisational diagram and discuss. (8)

    (ii) How can the customer complaints used to improve the quality of products and services? What are the various avenues available? (8)

Or

    (b) (i) Explain with an example the implementation of PDSA cycle. (8)

    (ii) What are the condition for selection and evaluation of suppliers? (8)

13. (a) (i) How is cause and effect diagram used? Give an example. (8)

    (ii) How are different histogram shapes interpretted? (8)

Or

    (b) Explain the step by step method of drawing interrelationship diagram with an example. How is the diagram used? (16)

14. (a) (i) What are the criticisms against benchmarking? (4)

    (ii) Explain 'the house of quality' used for Quality Function Deployment with a simple diagram. (12)

Or

    (b) (i) Discuss the step and quadratic loss functions in detail. (8)

    (ii) What are the pillars of total productive Maintenance? Discuss them in detail. (8)

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15. (a) What are the steps in the implementation of a quality system? Discuss them in detail.

Or

(b) What are the different types of quality auditings performed in the organisations which have implemented ISO 9000? Discuss their details and the people involved.

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