

B.E.(FULL TIME) DEGREE END SEMESTER EXAMINATIONS, APRIL / MAY 2011
ELECTRONICS AND COMMUNICATION ENGINEERING BRANCH
EIGHTH SEMESTER

GE 481 TOTAL QUALITY MANAGEMENT

(REGULATION 2004)

Time: 3 Hours

Max.Marks: 100

PART- A (10 x 2 = 20 Marks)

1. What are the six basic concepts that a successful TQM Programme require?
2. What are the customer's perception on quality?
3. What are the elements of cost of external failure?
4. What are the techniques commonly used for performance measure presentation?
5. When do you use the scatter diagram?
6. List the new seven management tools for Quality Control?
7. Sketch graphically σ , 2σ and 3σ Limits on a normal curve and explain the significance?
8. What are the four phases of product development in QFD process?
9. Differentiate the term Failure Mode and Failure Effects?
10. What are the documents required for QS 9000 programmes?

PART- B (5 x 16 = 80 Marks)

- 11.(i) What is six sigma? and briefly explain the concept of six sigma principle? (8)
- (ii) Briefly explain the Taguchi's quality loss function with an illustration. (8)
- 12.(a)(i) List out the Deming fourteen point on route to quality. (10)
- (ii) Explain the different types of costs contributing to cost of quality. (6)
- OR
- 12.(b)(i) What is PDSA cycle. (3)
- (ii) Explain the phases of the PDSA cycle. (5)
- (iii) What is Kaizen? In what way, it sustains the continuous improvement? (5)
- (iv) Differentiate Kaizen and Kairyo. (3)
- 13.(a)(i) Explain the Juran's trilogy for continuous process improvement. (8)
- (ii) List the five levels in Maslow's hierarchy of needs and describe each level also explain how motivation influences the employee involvement? (8)
- OR
- 13.(b)(i) What is bench marking? Explain the reasons for bench marking. (6)
- (ii) What is meant by Quality Auditing? (4)
- (iii) What are the documents required to implement ISO 9000 system in companies. (6)

- 14.(a)(i) What is meant by QFD process? Describe the four phases of QFD? (8)
(ii) Write the step by step procedure for implementing a FMEA of a product. (8)

OR

- 14.(b)(i) What is TPM? Write the step by step procedure to develop a TMP programme in an organization. (8)
(ii) Write down the step by step procedure of achieving the ISO 9000 registration. (8)

- 15.(a)(i) List the Ishikawa's ten principles for customer / supplier relations. (8)
(ii) What is performance measures presentation? Explain the commonly used techniques for presenting performance measures? (8)

OR

- 15.(b)(i) What are organization evaluation standards and product evaluation standards? (8)
(ii) What is meant by environmental policy? (4)
(iii) Define the following terms:
(a) Environmental aspect
(b) Environmental objective (4)
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