

23.12.2022

Reg. No.

Question Paper Code

11512

B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022

Seventh Semester

Electrical and Electronics Engineering

(Common to Mechanical Engineering and Production Engineering)

GE8077 - TOTAL QUALITY MANAGEMENT

(Regulations 2017)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

- |   | <i>Marks,<br/>K-Level, CO</i> |
|---|-------------------------------|
| 1. Give the six basic concepts of TQM.                              | 2,K2,CO1                      |
| 2. Differentiate Quality of Conformance and Quality of Performance. | 2,K2,CO1                      |
| 3. List the characteristics of good leadership.                     | 2,K2,CO2                      |
| 4. Classify the types of motivation.                                | 2,K1,CO2                      |
| 5. Name new seven management tools.                                 | 2,K1,CO3                      |
| 6. Distinguish between failure mode and failure effects.            | 2,K2,CO3                      |
| 7. What are the costs taken to calculate the cost of quality?       | 2,K2,CO4                      |
| 8. What are the areas in which QFD is used?                         | 2,K2,CO4                      |
| 9. Compare QS 9000 with TS 16949 quality system.                    | 2,K2,CO5                      |
| 10. Write the significance of quality auditing.                     | 2,K1,CO5                      |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

- |   |           |
|---|-----------|
| 11. a) (i) Write down the underlying principles of TQM.   | 7,K2,CO1  |
| (ii) Describe the various dimensions of quality.  | 6,K2,CO1  |
| <b>OR</b>   |           |
| b) How would you summarize customer complaints, customer satisfaction and retention in details?   | 13,K2,CO1 |
| 12. a) Explain the requirements of effective leadership and summarize leadership roles in detail. | 13,K2,CO2 |
| <b>OR</b>   |           |
| b) Enumerate the Japanese 5S as applicable to services and manufacturing company.                 | 13,K2,CO2 |

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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13. a) Describe the seven traditional tools of quality. 13,K2,CO3

**OR**

b) Analyze the three main types of benchmarking. In what circumstances would each type be more appropriate? 13,K4,CO3

14. a) What is quality cost? Explain the different categories and elements of COQ. How it is useful as a performance measure? 13,K2,CO4

**OR**

b) Write down the objectives of implementing TPM. Discuss about the core elements of TPM program. Compare TQM and TPM. 13,K2,CO4

15. a) Discuss the various elements of ISO 9000-2000 quality systems. 13,K2,CO5

**OR**

b) Estimate the role of audit checklist for quality management system. 13,K2,CO5

**PART - C (1 × 15 = 15 Marks)**

16. a) Evaluate the duties of quality council and explain McGregor's theory X and theory Y. 15,K3,CO6

**OR**

b) Develop a house of quality for designing a mobile phone. 15,K3,CO6