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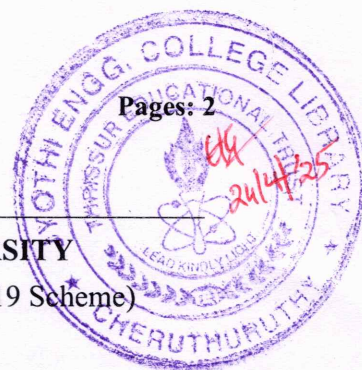
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APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
B.Tech Degree S8 (R,S) / S6 (PT) (R,S) Exam April 2025 (2019 Scheme)



Course Code: MET414

Course Name: QUALITY MANAGEMENT

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks.

Marks

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|----|---|-----|
| 1 | List the TQM axioms. | (3) |
| 2 | Identify three common barriers to implementing Total Quality Management in an organization. | (3) |
| 3 | Define Six Sigma and identify one key principle associated with it. | (3) |
| 4 | What is Kaizen? | (3) |
| 5 | What is the role of leadership in facilitating TQM within an organization? | (3) |
| 6 | How does employee involvement contribute to TQM principles? | (3) |
| 7 | How does Scatter Diagram aid in TQM projects? | (3) |
| 8 | What is the significance of Cause and Effect Analysis in TQM? | (3) |
| 9 | What is management responsibility as per ISO 9001:2000 model? | (3) |
| 10 | List the stages involved in product realization according to ISO 9001:2000. | (3) |

PART B

Answer any one full question from each module, each carries 14 marks.

Module I

- 11 a) Analyze Crosby's fourteen steps for quality improvement, discussing how each step contributes to achieving and maintaining high levels of quality in an organization. (14)

OR

- 12 a) Discuss the principles and objectives of Total Quality Management (TQM), highlighting its significance in ensuring organizational success and competitiveness. (14)

Module II

- 13 a) Explain the process of Quality Function Deployment (QFD) and discuss its significance in integrating quality into strategic management. (14)

OR

- 14 a) Analyse the obstacles that organizations may face in achieving successful strategic quality management. Provide examples and strategies to overcome these obstacles. (14)

Module III

- 15 a) Explain the importance of employee involvement, motivation, and empowerment in TQM. (14)

OR

- 16 a) Compare and contrast the roles of traditional leadership and leadership for TQM. How does a leader's approach need to shift to foster a culture of continuous improvement within the organization? (14)

Module IV

- 17 a) Evaluate the importance of Control Charts in enhancing process capability within TQM initiatives. Discuss how organizations can utilize Control Charts to monitor and maintain process stability and performance over time. Substantiate using appropriate example. (14)

OR

- 18 a) Explain the core principles of TPM and FMEA, highlighting their individual strengths in achieving equipment reliability and process optimization. (14)

Module V

- 19 a) Compare and contrast the ISO 9000 family of standards with the ISO 14000 family of standards. Discuss their respective focuses, benefits, and applications in organizational management and sustainability practices. (14)

OR

- 20 a) Discuss the significance of management responsibility in ensuring effective quality management systems according to ISO 9001:2000. Provide examples of how management commitment can influence organizational quality culture. (14)
