



MUTHAYAMMAL ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University)

Rasipuram - 637 408, Namakkal Dist., Tamil Nadu.

Department of Electrical and Electronics Engineering Question Bank - Academic Year (2021-2022)

Course Code & Course Name : 19EEE09 & Total Quality Management
Name of the Faculty : Mrs.M.Selvakumari
Year/Sem/Sec : III/V/A

Unit-I: Introduction

Part-A (2 Marks)

1. Why is quality required in produce and services today?
2. Define Quality Cost index & its example.
3. Write an example for quality statement.
4. List dimensions of quality.
5. Interpret the barriers of TQM.
6. Elucidate Kaizen.
7. How would you show your understanding on the Juarn's quality planning?
8. Mention the essential steps of quality planning.
9. Classify the basic concepts of TQM.
10. What do you mean by cost of Quality?

Part-B (16 Marks)

1. Explain Deming's Fourteen Principles for Quality Management. How do you feel that will be useful in today's context in service industry (16)
2. Describe the phases of PDSA cycle with suitable illustrations. (16)
3. (i)Elaborate the Japanese 5s applicable to services. (8)
(ii) How is kaizen practiced in workplace? (8)
4. (i)Why to measure quality cost? Classify the various types of quality cost & give examples. (8)
(ii) Elucidate the barriers while implementing the TQM (8)
5. (i)Compare the dimensions of product quality and service quality with example. (8)
(ii)Brief in detail the various principles of quality management. (8)

Unit-II : Tqm Principles

Part-A (2 Marks)

1. How employee involvement can be improved in an organization?
2. Distinguish between Reward & Recognition.
3. Write the requirements of reliable supplier rating.
4. What is the Relationship Between Competition and Customer Focus?
5. Interpret the objectives Quality councils.
6. Illustrate the role of management in TQM?
7. How can quality be quantified?
8. Define Leadership.
9. Explain empowerment.
10. List the characteristics of good leadership.

Part-B (16 Marks)

1. How would you describe the characteristics of quality leader and leadership styles for effective leaders in detail (16)
2. (i)What is supplier partnering? Indicate its importance benefits. (8)
(ii)List the various steps involved in supplier selection. (8)
3. (i)Estimate team types and characteristics of successful team. (8)
(ii)Evaluate Concept of Employee empowerment and general principles and characteristics (8)
4. (i)Elucidate the steps in forming performance appraisal system. (8)
(ii)What are the benefits? and classify the different performance appraisal techniques. (8)
5. (i)Enumerate the duties of quality council (8)
(ii)Analyze the concept of motivation and explain in detail? (8)

Unit-III : Statistical Process Control

Part-A (2 Marks)

1. Summarize the evolution of six sigma in Motorola Company.
2. Mention the measures of central tendency.
3. List any four traditional tools of quality.
4. What do you mean by six sigma? Outline the scope of six sigma principle.
5. Name some new management tools.
6. Outline the scope of six sigma principle.
7. Compare Tree diagram and Decision tree diagram.
8. In what way, matrix data analysis differs from all other management tools?

9. Classify control charts.
10. Define process capability index

Part-B (16 Marks)

1. Clarify six sigma concepts. Elaborate the steps of six sigma process & six sigma organization. (16)
2. (i) Describe the seven traditional tools of quality. (8)
(ii) Explain the Process Capability Studies by Control Chart Method. (8)
3. (i) How would you solve the tree diagram and arrow diagram? (8)
(ii) Illustrate quality control chart and how it can be used. What are the upper and lower control limits. (8)
4. (i) What do you mean by central tendency? Describe three measures of central tendency. (8)
(ii) Infer how is Pareto analysis done? Explain with an example (8)
5. (i) Elucidate the new seven management tools in detail with their typical application (8)
(ii) Explain about different types of control charts for attributes. (8)

Unit-IV : Tqm Tools

Part-A (2 Marks)

1. What is bench marking?
2. Can you recall the significance of Taguchi's QLF?
3. Write the features of Activity network diagram.
4. List any four traditional tools of quality.
5. Differentiate between process distribution check sheet and defective item check sheet.
6. Name some new management tools.
7. How would you apply what you learned to develop QFD?
8. Can you list the three benefits of FMEA?
9. Enumerate the importance of process capability.
10. List the objectives of TPM.

Part-B (16 Marks)

1. How would you show your understanding of Bench marking process? List the various reasons for bench marking. (16)
2. Devise a QFD Methodology for design and development of cups used in vending machine for dispersing hot and cold beverages. (16)
3. (i) Explain the stages involved in developing TPM. (8)
(ii) Explain the various types of maintenance techniques (8)
4. (i) Explain would you prepare a FMEA work sheet for an induction motor's shaft failure or a failure of your choice. (8)
(ii) Analyze the three main types of benchmarking. In what circumstances would each type be more appropriate. (8)

5. (i) Describe the four phases of QFD. (8)
(ii) What are the six major loss areas need to be measured for implementing TPM . (8)

Unit-V : QUALITY SYSTEMS

Part-A (2 Marks)

1. Define ISO. What is the need for ISO
2. What is QS 9000 standard?
3. Give some list of quality systems.
4. Enumerate the steps necessary to implement the Quality Management System.
5. Can you list the three sections of QS-9000?
6. What is quality audit?
7. Mention the elements of ISO 14000.
8. Give the types of Organizational Evaluation Standards
9. Specify the objectives of “quality policy”.
10. Compare QS 9000 with TS 16949 quality system

Part-B (16 Marks)

1. Explain the steps followed to get ISO9000 certification for an IT industry. (16)
2. (i) What are the steps to be followed in implementing quality system ISO 9001:2000. (8)
(ii) What is ISO9000:2000? State its scope and applications? (8)
3. (i) Discuss about the four important documents to be prepared for ISO9000 certification. (8)
(ii) What are the benefits of implementing ISO 14000 standard (8)
4. Explain the need for ISO 9000 and other Quality system (16)
5. (i) Point out the benefits of EMS (8)
(ii) Discuss quality auditing in detail . (8)

Course Faculty

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