



**Dhanalakshmi Srinivasan College of Engineering and Technology  
Chennai - 603104.**

**DEPARTMENT OF MECHANICAL ENGINEERING  
GE6757-Total-Quality-Management**

**QUESTION BANK**

UNIT-1

Part-A

1. Define quality as per Deming?
2. What are quality statements? Give examples.
3. What are the seven faces of quality
4. Define strategic planning.
5. State the seven underlying
6. List the advantages of implementing TQM in a manufacturing industry.
7. List the barriers for implementing TQM.
8. Define “Quality” and “TQM”.
9. What is meant by “Cost of Quality”?
10. What are the dimensions of quality?
11. Write the equation that would quantify quality.
12. What are the essential steps of quality planning?
13. What is hidden cost?
14. Who are quality Gurus?
15. What is quality council?
16. What are the duties of quality council?

Part-B

IMPORTANT QUESTIONS

1. List out the barriers of TQM implementation?
2. Discuss about the analysis techniques for the quality cost?
3. Explain the principles of TQM.
4. Explain about the strategic planning.
5. Explain Deming’s philosophy for the improvement for the quality, productivity and competitive position.
6. Discuss about strategic planning and list out the characteristic behaviors of successful leaders?



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7. What are the different definitions given for quality? Explain how it got evolved and what its prime concerns.
8. Discuss the management techniques for establishing quality costs.
9. Describe the various Quality statements. Give examples.
10. Explain the process of establishing cost of quality.
11. State and explain the principles of TQM.
12. . Explain Deming's fourteen points for the improvement of quality management.
13. What is quality cost? Explain the techniques used for Quality cost? (16)
14. Explain the principles of TQM? (16)
15. Explain Deming Philosophy? (16)
16. Explain the barriers to TQM implementation? (16)
17. Explain the concepts of Leadership? (16)

UNIT-2

Part-A

1. Explain empowerment
2. Explain supplier selection.
3. Customer retention is more power than customer satisfaction. Why?
4. What is kaizen? Mention the five S's workplace organization.
5. How do the business people measure customer's satisfaction?
6. What are the strategic goals of performance measure?
7. Define customer retention.
8. Define employee empowerment.
9. What are the Maslow's basic needs?
10. What are physiological needs?
11. List the Herzberg's motivators and dissatisfier.
12. List four common barriers to team progress.
13. What are the steps in the PDSA cycle?
14. What is 5S?
15. What is a Kaizen?
16. What are the three key elements to a partnering relationship?

Part-B



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1. Explain about the leadership concept.
2. Explain the role of senior management.
3. Explain the following.
  - (i) 5S
  - (ii) Kaizen
  - (iii) Suppliers rating and relationship development.
4. Discuss about Maslow's need hierarchy theory and Herzberg's two factor theory for motivation.
5. List and Explain the most important factors that influence customer purchases.
6. How customer needs are translated into requirements in Kano model.
7. What are the characteristic of successful teams?
8. Explain the types of problems expected in a product and the improvement strategies which are applied on the product?
9. Explain PDCA cycle.

**UNIT-III**  
**TQM TOOLS & TECHNIQUES I**  
**Two marks**

1. What are the benefits of Benchmarking?
2. What are the types of benchmarking?
3. What are the steps required to construct an affinity diagram?
4. What are the parts of house of quality?
5. How will you build a house of quality?
6. Define FMEA?
7. What are the stages of FMEA?
8. What are the generic steps for the development and execution of action plans in benchmarking?
9. What are the several types of FMEA?
10. What are the seven faces of quality?
11. What is six sigma?
12. Name any 3 methods in six sigma concepts.
13. List the characteristics used to measure the performance of a process.
14. Define strategic planning
15. What is a measure of central tendency?
16. What is Measures of dispersion?
17. What is the use of the control chart?
18. Give the objectives of the attribute charts?
19. Give the usage of C&E diagrams?
20. Define SixSigma?
21. What are the various histogram shapes?
22. Differentiate Population & Sample?



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23. Mention the uses of control chart.
24. What are the benefits of an activity network diagram?)

PART – B

1. Discuss process capability and explain the relationship of seven quality tools for variables
2. Discuss the seven tools of quality and new management tools for improving product and service quality.
3. Discuss the various Benchmarking process in an organization
4. Explain the Benchmarking process. What is benchmarking and why do the organizations adopt this technique?
5. Explain the relevance of 6-sigma concept in achieving quality output in a Process & Give example of six-sigma concept
6. Explain the different steps involved in Failure mode Effect analysis with an example.

UNIT-IV

TQM TOOLS & TECHNIQUES II

PART A

1. What is a QFD?
2. What are the benefits of QFD?
3. What are the steps required to construct an affinity diagram?
4. What are the parts of house of quality?
5. How will you build a house of quality?
6. What are the goals of TPM?
7. Give the seven basic steps to get an organization started toward TPM?
8. What are the major loss areas?
9. What are the phases of QFD process?
10. Define TPM?
12. What is cost appraisal?
13. What are the cost of appraisal?
14. What is meant by cost of internal failures?
15. List the components cost of internal failures.
16. What is meant by cost of external failures?
17. Give the sub-elements of Preventive cost category?
18. Give the sub-elements of Appraisal cost category?
19. Give the sub-elements of Internal failure cost category?
20. Give the sub-elements of External failure cost category?
21. Give the typical cost bases?
22. How will you determine the optimum cost?
23. How can QFD be deployed?
24. What is the formula for measuring equipment effectiveness?



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**PART B**

1. Explain Quality function Deployment in detail.
2. Discuss about Basic structure of House of quality
3. Explain the procedure to construct a 'House of Quality'.
4. Explain the concept of Taguchi's quality loss function in detail. Give an example.
5. Explain the seven step plan to establish the TPM in an organization in detail
6. Similarities and differences between TQM and TPM
7. Explain quality costs

**UNIT- V  
QUALITY SYSTEMS**

*Part – A*

1. What do you mean by the term quality system?
2. What is ISO?
3. What is the difference between ISO 9000 and ISO 14000?
4. What is the need for the quality system in an organization?  
(Or) What is the need for ISO 9000?  
(Or) What are the objectives of ISO 9000?
5. What is the function of ISO 9000 family?
6. What is ISO 9000:2000?
7. Who is responsible for developing the ISO 9000 standards?
8. Where we can apply the ISO 9000 series of standards?
9. Name the ISO series of standards.
10. Differentiate between ISO 9001 and ISO 9004.
11. Draw the model of process based quality management system given in ISO 9001:2000.
12. What is the equivalent Indian standard for ISO: 8402?
13. Write down the necessity for documentation.
14. What are the advantages of having a documentation quality system?
15. What are the documents required for implementation the quality system?
16. What is the need for documentation?  
(Or) State the benefits of documentation?
17. What are the objectives of quality audits?
18. What is the third party audit?
19. List the stages of an audit.
20. Explain about NCR.
21. What is QS 9000?
22. What is the objective of QS 9000?
23. Mention any two organizational benefits QS 9000.
24. What is ISO/TS 16949?
25. What is ISO 14000?
26. In what way, the concept of ISO 14000 differs from ISO 9000 series of quality system?
27. List out the various organization evaluation standards of ISO 14000 series of standards.
28. List out the various product evaluation standards of ISO 14000.
29. Differentiate the terms environmental aspects and environmental impact.



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30. Contrast environmental objective and environmental target.
31. What is an environmental objective?
32. What are the concepts of ISO 14000?
33. List out the five stages of EMS model.
34. What is mean by environmental policy?
35. What is a purpose EMS audit?
36. What are the main elements of ISO 14000 standards?
37. List the benefits that could be realized by implementing an ISO14000 quality system.
38. What are the purposes of the following standards: (i) ISO 14001: 1996; (ii) ISO 14004: 1996; (iii) ISO 14020: 2000; and (iv) ISO 14040:1997?
39. What is the need for ISO 9000?
40. What are the elements of quality systems?

**Part – B**

1. Explain the documentation process in ISO 9000:2000 system.
2. Explain in detail about the quality auditing.
3. Explain about QS 9000-Automotive quality management systems.
4. Discuss about ISO 14000: Environmental Management System Standards.)  
Requirements of ISO 14001:  
Or (Elements\Clauses of Environmental Management System)  
Or (EMS requirements)