

# SHRI ANGALAMMAN COLLEGE OF ENGINEERING & TECHNOLOGY (An ISO 9001:2008 Certified Institution) SIRUGANOOR, TRICHY-621105.



#### **Department of Mechanical Engg.**

#### **MG 1301-TOTAL QUALITY MANAGEMENT**

# UNIT-I INTRRODUCTION PART-A

- 1. Define Total Quality?
- 2. Define Quality?
- 3. What are the Dimensions of Quality?
- 4. Give the Basic Concepts of TQM?
- 5. Give the Principles of TQM?
- 6. Give the Obstacles associated with TQM Implementation?
- 7. Give the Analysis Techniques for Quality Costs?
- 8. Define Quality Costs?
- 9. Give the primary categories of Quality cost?
- 10. Give the typical cost bases?
- 11. How will you determine the optimum cost?
- 12. State the Quality Improvement Strategy?
- 13. Define Quality Planning?
- 14. Give the Objectives of TQM?
- 15. What is needed for a leader to be effective?
- 16. What is the important role of senior management?
- 17. What are the general duties of a quality council?

### PART - B

- 1. What is quality cost? Explain the techniques used for Quality cost? (16)
- 2. Explain the principles of TQM? (16)
- 3. Explain Deming Philosophy? (16)
- 4. Explain the barriers to TQM implementation? (16)
- 5. Explain the concepts of Leadership? (16)

# UNIT-II TQM principles PART-A

- 1. What is a mission statement?
- 2. What is a vision statement?
- 3. What are the important factors that influenced purchases?
- 4. Give the need for a feedback in an organization?
- 5. List the tools used for feedback?
- 6. What are the activities to be done using customer complaints?
- 7. What are the elements of customer service?
- 8. Define Customer Retention?
- 9. Define Employee Involvement?
- 10. State Maslow's Hierarchy of Needs?

- 11. State Frederick Herzberg's Two-factor theory?
- 12. What does an employee want?
- 13. What are the concepts to achieve a motivated work force?
- 14. Define Empowerment?
- 15. What are the three conditions necessary to create the empowered environment?
- 16. What are the types of teams?
- 17. What are the characteristics of successful teams?
- 18. What are the decision-making methods?
- 19. What are the stages of team development?
- 20. Give some common team problems?
- 21. What are the common barriers to team progress?
- 22. Give the steps involved in training process?
- 23. Define Recognition and Reward?
- 24. What are the types of appraisal formats?
- 25. What are the benefits of employee involvement?
- 26. What are the basic ways for a continuous process improvement?
- 27. What are the three components of the Juran Trilogy?
- 28. What are the steps in the PDSA cycle?
- 29. What are the phases of a Continuous Process Improvement Cycle?
- 30. Define 5S?
- 31. What is a Kaizen?
- 32. What are the three key elements to a partnering relationship?
- 33. What are the three types of sourcing?
- 34. What are the ten conditions for the selection and evaluation of suppliers?
- 35. What are the characteristics used to measure the performance of a particular process?
- 36. Give the six basic techniques for presenting performance measures?
- 37. Give the usage of an effective recognition and reward system?
- 38. How will you improve the performance appraisal system?
- 39. What are the typical measurements frequently asked by managers and teams?

### PART - B

- 1. Explain Juran trilogy for Continuous Process Improvement? (16)
- 2. Explain the PDSA cycle? (16)
- 3. Explain Kaizen principle? (16)
- 4. Explain how the employee will be involved in doing a process? (16)

#### UNIT- III STATISTICS PROCESS CONTROL PART – A (2 MARKS)

- 1 Define Statistics?
- 2. What is a measure of central tendency?
- 3. What is Measures of dispersion?
- 4. What is a normal curve?
- 5. What is the use of the control chart?

- 6. Give the objectives of the attribute charts?
- 7. Define Six Sigma Problem Solving Method?
- 8. What are the new seven management tools?
- 9. Give the seven tools of quality?
- 10. Give the usage of C&E diagrams?
- 11. Define Six Sigma?
- 12. What are the various histogram shapes?
- 13. Differentiate Population & Sample?
- 14. Give the sources of variation?
- 15. Define Run chart?
- 16. Define Control chart?
- 17. What are the various patterns of scatter diagrams?
- 18. What is the procedure for constructing the tree diagram?
- 19. Give at least five standard formats of matrix diagram?
- 20. What are the benefits of an activity network diagram?

#### PART - B

- 1. Explain the QC or SPC tools? (16)
- 2. Explain the Seven Management Tools? (16)
- 3. Plot the control chart for variables and attributes (16)
- 4. Explain the concepts of Six Sigma? (16)

### UNIT- IV TQM TOOLS PART – A (2 MARKS)

- 1. Define Benchmarking?
- 2. Enumerate the steps to benchmark?
- 3. What are the types of benchmarking?
- 4. What is a QFD?
- 5. What are the benefits of QFD?
- 6. What are the steps required to construct an affinity diagram?
- 7. What are the parts of house of quality?
- 8. How will you build a house of quality?
- 9. Define FMEA?
- 10. What are the stages of FMEA?
- 11. What are the goals of TPM
- 12. Give the seven basic steps to get an organization started toward TPM?
- 13. What are the major loss areas?
- 14. What are the generic steps for the development and execution of action plans in benchmarking?
- 15. What are the phases of QFD process?
- 16. What are the several types of FMEA?
- 17. Define TPM?

#### PART - B

- 1. Explain the Bench marking Process and reasons to Benchmark? (16)
- 2. Explain the QFD process? (16)
- 3. Explain the House of Quality in Quality Function Deployment? (16)
- 4. What is FMEA? Explain the stages of FMEA? (16)

# UNIT- V QUALITY SYSTEMS PART – A (2 MARKS)

- 1. Give the ISO 9000 Series of Standards?
- What is the need for ISO 9000?
- 3. Give some other quality systems?
- 4. Give the objectives of the internal audit?
- 5. What are the requirements of ISO 14001?
- 6. What are the benefits of ISO 14000?
- 7. What are the four elements for the checking & corrective action of ISO 14001?
- 8. What are the seven elements for the implementation & operations of ISO 14001?
- 9. What are the four elements for the planning of ISO 14001?
- 10. Give the types of Organizational Evaluation Standards?
- 11. Give the types of Product Evaluation Standards?
- 12. Define Quality Audits?
- 13. Analyze TQM?
- 14. What are the benefits of ISO?
- 15. Give the ISO 9001 requirements?
- 16. What are the methods of actual audit?

17.

## PART - B

- 1. Explain the elements of ISO 9000:2000? (16)
- 2. Explain the implementation and documentation of Quality System? (16)
- 3. Explain the requirements of ISO 14000? (16)
- 4. Explain the Benefits of ISO 14000? (16)
- 5. Discuss about ISO 9000:2000 Quality Systems? (16)
- 6. Why is ISO 9000 important? Explain briefly. (16)