

EASWARI ENGINEERING COLLEGE

DEPARTMENT OF MANAGEMENT STUDIES



BA 7054 - LEAN SIX SIGMA

Question Bank

Part A

- 1. Define Six Sigma.
- 2. What is Lean Manufacturing?
- 3. What is Process Tolerance?
- 4. Define Process Capability Index.
- 5. Differentiate Cp & Cpk.
- 6. How are Six Sigma & Process Tolerance related?
- 7. How are Six Sigma & Process Capability related?
- 8. How are Six Sigma & TQM related?
- 9. How are Six Sigma & Lean manufacturing related?
- 10. What is Cost of Poor Quality?
- 11. Illustrate with examples Cost of Doing Nothing.
- 12. List the different types of tools used in six sigma.
- 13. What is CTQ Tree?
- 14. What are the tools for measuring the performance of an organization?
- 15. Illustrate with examples, the applications of Histograms?
- 16. When are scatter diagrams used?
- 17. Draw cause and effect diagram with a suitable example.
- 18. Differentiate Pareto charts and Control charts.
- 19. List the different tools for analysis.
- Differentiate SWOT and PESTLE Analysis.
- 21. Define overall equipment effectiveness.
- 22. What is Interrelationship diagram?

- 23. Name the tools for improvement.
- 24. What are the tools for control?
- 25. Explain forced field analysis.
- 26. What is Value Stream Mapping?
- 27. Brief about design for six sigma.
- 28. List the steps involved in DFSS.
- 29. What is FMEA?
- 30. Define RPN.
- 31. How are six sigma and leadership interrelated?
- 32. What is CAP?
- 33. How will you develop a communication plan?
- 34. Who is a stakeholder?
- 35. Do you think Communication plays an important role in six sigma?
- 36. Is committed leadership required in Six Sigma?
- 37. Compare DMAIC & DMADV.
- 38. Compare DMAIC & DFSS.
- 39. What are the tools for implementation of six sigma?
- 40. Depict SIPOC with a suitable diagram.
- 41. What is QFD?
- 42. What are the applications of QFD?
- 43. List the different components of QFD.
- 44. What are the factors to be considered in the selection of a project?
- 45. Define closed communication system.
- 46. What are the challenges faced in customer quality index?
- 47. Illustrate CPQ vs Six Sigma.
- 48. What are the challenges faced in implementing six sigma?
- 49. What is customer quality index?
- 50. Why is evaluation strategy required?
- 51. Define ROSS.

- Differentiate ROSS and ROI.
- 53. What is the economics of six sigma?
- 54. Define continuous improvement.
- 55. What is Lean Manufacturing?
- 56. Illustrate the focus on waste and overproduction with example.
- 57. What are the 7 wastes?
- 58. Differentiate inventory in progress and work in progress.
- 59. How is Kaizen implemented in an organization?

Part B

- 1. Give a detailed report on how Six Sigma is related to TQM, lean manufacturing and process tolerance.
- 2. Explain in detail how cultural changes affect six sigma.
- 3. Briefly describe process capability and how to measure Cp and Cpk, with practical examples.
- 4. Enumerate the importance of cost of quality.
- 5. Explain the evolution of TQM and six sigma.
- 6. Explain the relationship between lean manufacturing and six sigma.
- 7. Explain the various tools for definition in detail, with neat sketches and examples.
- 8. List the different tools for measurement and describe any 4 in detail.
- 9. Illustrate the different tools for analysis and describe any 8 in detail.
- 10. List the different tools for improvement and describe any 5 in detail.
- 11. Enumerate the tools for control with examples.
- 12. Explain how a Milestone tracker diagram helps in continuous improvement of a firm.
- 13. How do you think an effective lean training program can be implemented in an organization?
- 14. Describe Earned value management in detail.
- 15. Explain DFSS and the steps in DFSS process.
- 16. How will you design an effective six sigma methodology for a concern?

- 17. Depict the process of FMEA with a sample form.
- 18. How do you think RPN value helps in effective six sigma methodologies?
- 19. Enumerate the management of change acceleration process in a firm and its advantages.
- 20. Illustrate how six sigma is related to committed leadership.
- 21. List the steps in developing an effective communication plan and depict a closed communication system.
- 22. Who are the stakeholders? What are the important roles of a stakeholder in an organization?
- 23. Explain the various tools for implementation in detail.
- 24. Describe SIPOC process in detail.
- 25. Explain house of quality with a suitable example.
- 26. Explain in detail about the concepts of a closed communication system.
- 27. How important is a customer to the firm and why is a quality index required? What are the various challenges faced?
- 28. Enumerate the various principles of CPQ and Six sigma.
- 29. List the various customer metrics to be considered with suitable examples.
- 30. Enumerate the challenges in implementing six sigma.
- 31. How do you evaluate continuous improvement methods? Illustrate with examples.
- 32. Define economies of six sigma. How will you calculate ROSS and ROI?
- 33. List the various factors to be considered during the implementation of Kaizen.
- 34. Discuss the importance of Lean Manufacturing in the industry.
- 35. Describe the 7 wastes in detail.
- 36. State the importance of Kaizen and its effective role in quality improvement.
- 37. Enumerate on six sigma continuous improvement process.