UNIT 1

1. Compare Validation and Verification.
2. Define Software quality.
3. Define: Process
4. Define: Testing and debugging
5. Compare: Errors, faults and failures
6. Define: metrics
7. Define the role of SQA Group.
8. Define: Defect repository
9. Explain the Software testing principles.
10. Describe the defect classes in detail with example.
11. Explain defect repository.
12. Explain defect classes.
13. Write role of tester in software development organization
14. Explain testing as a process.
15. Explain role of process in software quality.
16. Describe defect classes in details.
17. Describe testing as an engineering process.

UNIT 2

Q1. What is white box testing?
Q2. Give classification of white box testing.
Q3. Explain static testing in details with examples.
Q4. Explain structural testing in details with examples.
Q5. What is code functional testing?
Q6. Explain code coverage testing with examples.
Q7. Explain use of code control flow graphs with examples.
Q8. Write challenges of white box testing.
Q9. What is black box testing?
Q10. Discuss random testing.
Q11. Take any example to explain requirement based testing, design test cases to test system using requirement based testing.
Q12. Give example to demonstrate use of decision tables.
Q13. Give state transition diagram to explain use of state based testing.
Q14. Write use of cause effect graphing in software testing.
Q15. What is error guessing in testing.
Q16. Explain compatibility testing with example.
Q17. Which are levels of testing?
Q18. Explain the following--

1. Unit testing
2. Integration testing
3. Defect bash estimation
4. System testing
5. Acceptance testing

Q19. What is configuration testing? Explain its objectives.
Q20. Write steps of compatibility testing process.

UNIT 3

Q1.What is test automation?
Q2.Write skills needed for test automation.
Q3.What to automate in software testing?
Q4. What is scope of automation?
Q5.Explain design and architecture for automation.
Q6.Write generic requirements of test tool/framework.
Q7.Write process model for automation.
Q8.Section of a test tool.
Q9.What are challenges in automation?
Q10. What is Six Sigma life cycle?
Q11. What are roles and responsibilities for a successful Six Sigma quality program?
Q12. What is TQM?
Q13. What is complexity metrics model?
Q14. What is quality metrics model?
Q15. What is availability metrics?
Q16. Discuss defect removal effectiveness.
Q17. What is failure mode effects analysis (FMEA)?
Q18. What is quality function deployment?
Q19. Explain Taguchi quality loss function?
Q20. What is cost of quality?