VALLIAMMAI ENGINEERING COLLEGE
S.R.M. Nagar, Kattankulathur
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CP 7026-Software Quality Assurance
Unit-I

Part-A

1. What is quality?
2. What are the Views of Quality?
3. What is Quality Cost?
4. What is Quality Audit?
5. What are the various quality factors of Software?
6. Draw the Quality Framework?
7. What is Verification?
8. What is Validation?
9. Differentiate Verification and Validation?
10. What is Defects?
11. What is open bug?
12. What are the Risk levels in Bug Fixing?
13. How to manage the defects?
14. How we can measure defects?
15. What are the measurement techniques available in defect management?
16. Give any two IEEE standards of quality?
17. What is Quality Assurance?
18. What is use of Quality Assurance?
19. What are techniques available for Quality process?
20. What is Quality Control?

Part-B

1. Explain the view of Quality?
2. Explain the Quality cost in detail?
3. Describe the Quality Framework with suitable diagram?
4. Explain Verification with an example?
5. Explain Validation with an example?
6. Discuss the defect taxonomy in detail?
7. Discuss the defect management in detail?
8. Explain the various IEEE standards in detail?
9. Explain the various Quality Assurance methods in detail?
10. Explain the various Quality control processes in detail?

Unit-II

Part-A

1. What are the techniques in verification?
2. Why verification is needed?
3. Differentiate verification and testing?
4. What are the types of verification?
5. What are the various strategies in verification?
6. Why inspection is needed?
7. What is walkthroughs?
8. What is a formal review?
9. Differentiate Inspection and walkthrough?
10. What is an informal review?
11. What is internal audit?
12. What is external audit?
13. Who is a reviewer?
14. Who is a recorder?
15. What are the methods available for Reviewing?
16. Give any two examples for Auditing?
17. What is Questionnaire?
18. What are uses of Questionnaires?
19. What are techniques available for getting Questionnaires?
20. What is survey?

Part-B

1. Explain the techniques in verification in detail?
2. Explain the need of inspection in detail?
3. Describe the walkthroughs with suitable example?
4. Explain formal review with an example?
5. Explain informal review with an example?
6. Discuss the inspection in detail?
7. Discuss the Auditing in detail?
8. Explain the Questionnaire in detail?
9. Explain the survey in detail?
10. Explain the duties of reviewers in detail?

Unit-III

Part-A

1. What is Software Testing?
2. What are the types of testing?
3. What is Fault?
4. What is debugging?
5. What are the various testing strategies?
6. Why testing is needed?
7. What is Verification?
8. What is Validation?
9. Differentiate Verification and Validation?
10. What is test plan?
11. What is test case?
12. What are the methods for test generation?
13. What are the rules in equivalence partitioning?
14. What is Boundary value condition?
15. What are the methods available in category partition method?
16. Give any two examples for Equivalence partitioning?
17. What is Decision table?
18. Draw an example Decision table?
19. What are techniques available for combinatorial generation?
20. What is combinatorial generation?

Part-B

1. Explain the types of testing?
2. Explain the test generation in detail?
3. Describe the test plan with suitable diagram?
4. Explain test cases with an example?
5. Explain Validation with an example?
6. Discuss the equivalence partitioning in detail?
7. Discuss the Boundary value condition in detail?
8. Explain the Decision table with diagram in detail?
9. Explain the combinatorial generation in detail?
10. Explain the combinatorial generation in detail?

Unit-IV

Part-A

1. What are the Test adequacy criteria?
2. What are the different controls in flow graph?
3. What is block testing?
4. What is condition testing?
5. What are the various strategies in multiple condition testing?
6. Why path testing is needed?
7. What is MC/DC path test?
8. What is Data flow graph?
9. Differentiate control flow and Data flow graph?
10. What is C-use?
11. What is P-use?
12. What is Def-clear?
13. What is Def-use?
14. What is a finite state machine?
15. What are the methods available in finite state machine?
16. Give any two examples for Transition coverage?
17. What is Transition coverage?
18. What is Fault based testing?
19. What are techniques available for Mutation Analysis?
20. What is Mutation Analysis?

Part-B

1. Explain the Test adequacy criteria?
2. Explain the different controls in flow graph in detail?
3. Describe the multiple conditions testing with suitable example?
4. Explain Data flow graph with an example?
5. Explain MC/DC path test with an example?
6. Discuss the Def-clear and Def-use in detail?
7. Discuss the finite state machine in detail?
8. Explain the Transition coverage in detail?
9. Explain the Fault based testing in detail?
10. Explain the Mutation Analysis in detail?

Unit-V

Part-A

1. What are the Test adequacy criteria in Functional testing?
2. What are the different types functional testing?
3. What is a Use case?
4. What test case for Use cases?
5. What are the various strategies in Exploratory testing?
6. Why acceptance testing is needed?
7. What is system testing?
8. What is Regression testing?
9. Differentiate Integration and Unit Testing?
10. What is Load test?
11. What is Performance test?
12. What is alpha test?
13. What is beta test?
14. What is a stress test?
15. What are the methods available for security test?
16. Give any two examples for Test automation technique?
17. What is Test automation?
18. What are Test oracles?
19. What are techniques available for Usability testing?
20. What is Usability testing?

Part-B

1. Explain the different types functional testing?
2. Explain the test case for Use cases in detail?
3. Describe the Exploratory testing with suitable example?
4. Explain acceptance testing with an example?
5. Explain system testing with an example?
6. Discuss the Regression testing in detail?
7. Discuss the Integration testing in detail?
8. Explain the Test automation in detail?
9. Explain the Usability testing in detail?
10. Explain the Test oracles in detail?