



KINGS
COLLEGE OF ENGINEERING



DEPARTMENT OF INFORMATION TECHNOLOGY

QUESTION BANK

Sub. Code/ Name : CS1016 – SOFTWARE TESTING
Year / Sem : IV / VIII

UNIT- I
TESTING BASICS
PART – A (2 MARKS)

1. Define Software Engineering.
2. Define software Testing.
3. List the elements of the engineering disciplines.
4. Differentiate between verification and validation?
5. Define the term Testing.
6. Differentiate between testing and debugging.
7. Define process in the context of software quality.
8. Define the term Debugging or fault localization.
9. List the levels of TMM.
10. List the members of the critical groups in a testing process.
11. Define Error.
12. Define Faults (Defects).
13. Define failures.
14. Distinguish between fault and failure.
15. Define Test Cases.
16. Write short notes on Test, Test Set, and Test Suite.
17. Define Test Oracle.
18. Define Test Bed.
19. Define Software Quality.
20. List the Quality Attributes.
21. Define SQA group.
22. Explain the work of SQA group.
23. Define reviews.
24. List the sources of Defects or Origins of defects. Or list the classification of defect.
25. Programmer A and Programmer B are working on a group of interfacing modules.
Programmer A tends to be a poor communicator and does not get along well with

Programmer B. Due to this situation, what types of defects are likely to surface in these interfacing modules?

PART –B (16 MARKS)

1. Explain The Role of process in Software quality. (16)
2. Explain Testing as a Process. (16)
3. Overview of the Testing Maturity Model (TMM) & the test related activities that should be done for V-model architecture. (16)
4. Explain Software Testing Principles. (16)
5. Explain Origins of defects. (16)
6. Explain Defect Classes, Defect Repository, and Test Design. (16)
7. Explain Defect Examples: The Coin Problem. (16)
8. Explain the tester's role in a Software Development Organization. (16)
9. Explain Developer / Tester support for developing a defect repository. (16)

UNIT- II
TESTCASE DESIGN
PART – A (2 MARKS)

1. Define Smart Tester.
2. Compare black box and white box testing.
3. Draw the tester's view of black box and white box testing.
4. Write short notes on Random testing and Equivalence class partitioning.
5. List the Knowledge Sources & Methods of black box and white box testing.
6. Define State.
7. Define Finite-State machine.
8. Define Error Guessing.
9. Define COTS Components.
10. Define usage profiles and Certification.
11. Write the application scope of adequacy criteria?
12. What are the factors affecting less than 100% degree of coverage?
13. What are the basic primes for all structured program.
14. Define path.
15. Write the formula for cyclomatic complexity?
16. List the various iterations of Loop testing.
17. Define test set.
18. What are the errors uncovered by black box testing?

PART –B (16 MARKS)

1. Explain in detail about the Smart Tester. (16)
2. Explain in Test case design strategies. (16)
3. Explain the Types of black box testing. (16)
4. Explain Other Black box test design Approaches. (16)
5. Explain Black Box Testing and COTS (Commercial Off-the-shelf) components. (16)
6. Explain Types of white box testing. (16)
7. Explain Additional white box test design approaches. (16)
8. Evaluating Test adequacy Criteria. (16)

UNIT- III
LEVELS OF TESTING
PART – A (2 MARKS)

1. List the levels of Testing or Phases of testing.
2. Define Unit Test and characterized the unit test.
3. List the phases of unit test planning.
4. List the work of test planner.
5. Define integration Test.
6. Define System test.
7. Define Alpha and Beta Test.
8. What are the approaches are used to develop the software?
9. List the issues of class testing.
10. Define test Harness.
11. Define Test incident report.
12. Define Summary report.
13. Goals of Integration test.
14. What are the Integration strategies?
15. What is Cluster?
16. List the different types of system testing.
17. Define load generator and Load.
18. Define functional Testing.
19. What are the two major requirements in the Performance testing?
20. Define stress Testing.
21. Define Breaking the System.
22. What are the steps for top down integration?
23. What is meant by regression testing?

PART –B (16 MARKS)

1. Explain the Need for levels testing. (16)
2. Explain Levels of testing and software development paradigm. (16)
3. Explain Unit Test. (16)
4. Explain Unit Test Planning. (16)
5. Explain the class as testable unit. (16)
6. Explain in detail about the Test harness. (16)
7. Explain Integration Test. (16)
8. Explain System test: Different Types. (16)

UNIT- IV
TEST MANAGEMENT
PART – A (2 MARKS)

1. Write the different types of goals.
2. Define Goal and Policy.
3. Define Plan.
4. Define Milestones.
5. List the Test plan components.
6. Draw a hierarchy of test plans.
7. Define a Work Breakdown Structure.(WBS)
8. Write the approaches to test cost Estimation?
9. Write short notes on Cost driver.
10. Write the WBS elements for testing.
11. What is the function of Test Item Transmittal Report or Locating Test Items?
12. What is the information present in the Test Item Transmittal Report or Locating Test Items?
13. Define Test incident Report.
14. Define Test Log.
15. What are the three critical groups in testing planning and test plan policy?
16. Define Procedure.
17. What are the skills needed by a test specialist?
18. Write the test term hierarchy?

PART –B (16 MARKS)

1. Explain Testing and Debugging goals and Policy. (16)
2. Explain Test planning. (16)
3. Explain Test Plan Components. (16)
4. Explain Test Plan Attachments. (16)
5. Explain Reporting Test Results. (16)
6. Explain the role of the 3 critical groups. (16)

UNIT- V

CONTROLLING AND MONITORING

PART – A (2 MARKS)

1. Define Project monitoring or tracking.
2. Define Project Controlling.
3. Define Milestone.
4. Define SCM (Software Configuration management).
5. Define Base line.
6. Differentiate version control and change control.
7. What is testing?
8. Define Review.
9. What are the goals of Reviewers?
10. What are the benefits of a Review program?
11. What are the various types of Reviews?
12. What is Inspections?
13. What is WalkThroughs?
14. List out the members present in the Review Team.
15. List the components of review plans.

PART –B (16 MARKS)

1. Explain Measurements and milestones for monitoring and controlling. (16)
2. Explain Criteria for test completion. (16)
3. Explain Software configuration management. (16)
4. Explain in detail about the Types of reviews. (16)
5. Explain in Components of review plans. (16)

