Dr. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY

DEPARTMENT OF Information Technology

B.Tech. Information Technology Sem- VI

Subject: Software Testing

QUESTION BANK

Unit 1

1. Explain different Phases of software project.
2. Define Quality assurance and quality control.
3. Differentiate between Quality assurance and quality control.
4. Differentiate between Verification and validation.
5. Explain different Principles of Testing.
6. What Is Bug Life Cycle In Software Testing, Different Phases of Defect Life Cycle.
7. Explain Software Testing Life Cycle (STLC).
8. Differentiate between smoke testing and sanity testing.
9. What are test deliverables? Explain.
10. What is regression testing? When should Regression testing be performed?
11. What is the difference between re-testing and regression testing?
12. What is requirement Traceability matrix In Software Testing? What are its types? Explain its advantages.
13. Define software Testing
14. Differentiate between testing and debugging.
15. Distinguish between fault and failure.

Unit 2:

1. Explain V model in software engineering. What are Principles of the V Model.?
2. Differentiate between white box testing and black box testing.
3. Explain Static white box Testing.
4. Explain different types of Static white box Testing.
5. What is Desk checking? Explain Advantages and Disadvantages of Desk Checking.
6. what is Code Walkthrough in software testing? Explain.
7. Explain Advantages and Disadvantages of Fagan Inspection.
8. Explain Structural Testing.
9. What is Code Coverage Testing?
10. Explain Types of Code Coverage in software testing.
11. Explain Code Complexity Testing.
12. What is Cyclomatic complexity? Explain.
13. Explain different Steps in Determining Cyclomatic Complexity.
14. What is white box testing? What are Challenges in White Box Testing?
15. Explain Blackbox testing. What are different principles of black box testing?
16. What is requirement-based testing?
17. Differentiate between positive and negative testing.
18. What are boundary values? Explain Boundary value analysis with an example.
19. An input field takes the year of birth between 1900 and 2004 what are the boundary values for testing this field?

20. Consider a simple program to classify a triangle. Its inputs is a triple of positive integers (say x, y, z) and the date type for input parameters ensures that these will be integers greater than 0 and less than or equal to 100. The program output may be one of the following words:
    [Scalene; Isosceles; Equilateral; Not a triangle]
    Design the boundary value test cases.
21. Consider a program for determining the Previous date. Its input is a triple of day, month and year with the values in the range
    $1 \leq month \leq 12$
    $1 \leq day \leq 31$
    $1900 \leq year \leq 2025$
    The possible outputs would be Previous date or invalid input date. Design the boundary value test cases.
22. Explain decision table-based testing with an example.
23. Explain equivalence class partitioning.
24. explain graph-based testing methods.
25. What is compatibility testing? What are its types? when and why should perform compatibility testing?
26. Explain documentation Testing.
27. What are advantages of documentation testing.
28. Explain domain testing.
29. Explain exploratory testing?

Unit 3:

1. What is integration testing? Explain its types.
2. Differentiate between integration testing and unit testing.
3. Explain Big bang integration with an example
4. What are advantages of big bang testing?
5. What are advantages and disadvantages of top-down integration testing?
6. Explain top-down integration testing
7. What are advantages and disadvantages of bottom up integration testing?
8. Explain bottom up integration testing
9. What are advantages and disadvantages of bi directional integration testing?
10. Explain bi directional integration testing
11. Differentiate between stub and drivers.
12. Explain scenario testing.
13. Why do we create test scenarios?
14. Explain use case scenario with an example.
15. Differentiate between test scenario and test case
16. What is defect bash in software engineering? Explain with an example
17. What are advantages of defect bash?

Unit 4:

1. Explain system testing with an example
2. Differentiate between system testing and acceptance testing.
3. Explain Alpha and beta testing.
4. Differentiate between Alpha and beta testing.
5. Differentiate between functional and non-functional requirements
6. Explain functional testing
7. Explain non-functional testing
8. what are different non-functional testing parameters.?
9. Differentiate between functional and non-functional testing
10. Explain acceptance testing

Unit 5:

11. Explain performance testing
12. Differentiate between load testing and stress testing
13. Explain Regression testing
14. Differentiate between regression testing and retesting
15. Explain Internationalization testing
16. What is need of Internationalization testing?
17. Explain globalization testing
18. What are advantages of Internationalization testing?
19. Explain adhoc testing
20. What are different types of adhoc testing? explain.
21. Differentiate between buddy testing and pair testing
22. What is Monkey Testing?
23. What are advantages of adhoc testing?
24. What are disadvantages of adhoc testing?
25. Explain Exploratory testing
26. Differentiate between adhoc testing and Exploratory testing
27. What Is Iterative Testing?
28. What is the need of iterative testing?
29. What is agile testing? What are its advantages and best practices?
30. Explain principles of agile testing.
31. Explain Extreme programming.
32. Explain XP process
33. Explain Extreme testing
34. What is Error Seeding ?
35. Differentiate between Error Seeding and mutation testing.

Unit 6:

1. Differences between Procedural and Object-Oriented Programming
2. Why normal testing methods are not useful for object-oriented software?
3. Explain various approaches of object-oriented testing
4. Explain scenario-based object-oriented testing
5. Explain partition object-oriented testing
6. Explain fault based testing
7. Explain interclass test case design
8. Explain Random Testing