

## I M.Sc (CS)

### SOFTWARE TESTING

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**SUB CODE: PCS806S**

#### UNIT-1

1. What is the purpose for testing? Explain.
2. How will you do regression testing? Explain.
3. Discuss the purpose and principles of software testing in detail.
4. Is complete testing possible? Explain the reasons.
5. Write a detailed account on consequences of bugs.
6. Discuss in detail about the various principles of software testing.
7. Explain the taxonomy of bugs.
8. State the need for testing.
9. What are the objectives of software? List out various testing techniques.

#### UNIT-2

1. Difference between verification and validation.
2. State any two salient features of SRS document.
3. Define Software quality assurance.
4. State any two standards for software quality.
5. List the members of a SQA team.
6. Explain the software development life cycle.
7. Explain the benefits of SQA.
8. Describe the key quality control issues relating to software.
9. Describe the key quality control issues relating to software.
10. Explain the problems in implementing SQA.
11. Describe an approach for implementing a software quality program in an organisation?
12. Describe the various issues involved in Rapid Application Development testing.
13. Write the relationship between the productivity and quality in software.
14. Write a short note on testing, verification and validation.
15. What are the activities involved in prototyping model?
16. What is a V-process model? Explain.
17. Discuss the phases of SDLC.
18. Discuss in detail about the Rapid Application Development Models.
19. Difference between quality assurance and quality control.
20. Explain the following: a) Waterfall Model b) Spiral Model.

21. Explain the following: a) Prototyping Model.
22. List all software development life cycle models and explain any five software development life cycle models with suitable diagram.

### **UNIT – 3**

1. What is functional testing?
2. What are the types of testing required for testing a client / server system?
3. What are the purpose of using structural testing techniques? What are the various types of structural testing techniques? Explain any three techniques in detail?
4. Write the importance of functional testing.
5. Write the objective of design phase testing.
6. Define reliability testing.
7. Write the difference between execution and non execution based testing?  
Give example.
8. Explain the types of structural system testing during implementation with example.
9. What is the acceptance testing?
10. Explain the various functional and unit testing techniques in detail.
11. How will you do regression testing?
12. Write an overview of adhoc testing.
13. What is regression test? explain the two types of regression testing.
14. Explain the various phases of testing in detail.
15. Explain the following.
  - i) White box testing
  - ii) Integration testing
  - iii) Acceptance testing
  - iv) Stress testing
16. Differentiate the functional system testing and non functional testing system.
17. Explain the condition coverage and function coverage testing.
18. Write down the guidelines used to select the test for stress.
19. Discuss the common techniques of functional system testing.
20. Explain, how to perform the regression testing?
21. What is your understanding about scenario testing?
22. Discuss about dynamic testing.
23. Discuss about unit testing and integration testing related to object oriented system.
24. Explain white box testing.
25. Briefly explain the unit testing.
26. Discuss the methods to evolve scenarios in scenario testing.
27. Describe the guidelines for selecting test cases for acceptance testing.

### **UNIT-4**

1. What are the different approaches for appointing a testing team?
2. What is meant by life cycle testing approach? Explain.
3. What are the quality factors for usability? Explain.
4. List out and describe the tools for usability.
5. Write short note on strategies on object oriented test.

6. Explain the usability and accessibility testing strategies in detail.
7. List out the roles and responsibilities in usability testing.
8. Compare the testing and development function.
9. Write a detailed account on accessibility testing.
10. Discuss in detail about the different forms of accessibility testing.
11. Give the comparison between testing and development functions.
12. List the role of echo system.

### **UNIT-5**

1. Explain the components of total quality management.
2. What is test case? How does it differ from Test Plan?
3. What is Dimensions?
4. Explain the testing team structure for single product company.
5. Discuss the structures for multi-product companies.
6. Explain test management.
7. How will you prepare a test report? Explain.
8. Explain the three essential elements of test infrastructure management.
9. Discuss the three categories of best practices in testing.
10. List and explain the steps involved in test planning and management in detail.
11. Write a short note on challenges and issues in testing service organisations.
12. Write a detailed account on test planning.
13. Describe the difficulties encountered in testing products and its characteristics.
14. Explain test process and test reporting.