

CS403 Software Engineering (RGPV)

Unit-4: Software Analysis and Testing

Most Important Questions based on PYQ Analysis (2022-2025)

1. Differentiate Black Box Testing and White Box Testing with examples.
2. Explain Black Box Testing techniques (Boundary Value Analysis, Equivalence Partitioning, Decision Table).
3. Explain White Box Testing techniques (Statement, Branch and Path Coverage).
4. Differentiate Static Analysis and Dynamic Analysis.
5. Explain Software Testing Fundamentals and Testing Objectives.
6. Explain Software Testing Process with neat diagram.
7. Explain different Levels of Testing with examples.
8. Explain Unit Testing with advantages and disadvantages.
9. Explain Integration Testing and its strategies (Top-Down and Bottom-Up).
10. Explain System Testing and its types.
11. Explain Acceptance Testing, Alpha Testing and Beta Testing.
12. What is Test Case Design? Explain with suitable example.
13. What is Test Oracle? Explain its types and significance.
14. Explain Test Criteria and Coverage Metrics.
15. Discuss various Software Test Techniques.
16. Explain Code Inspection and its benefits.
17. Explain Testing Tools such as Selenium, JUnit and JMeter.
18. Explain Object-Oriented Analysis and Design (OOAD).
19. Differentiate OOAD and Structured Software Engineering.
20. Write short notes on Test Plan and Test Metrics.