40 Lecture - CS504

Important Mcqs

1. What is the main purpose of Unit Testing?

- a) Testing the entire application as a whole
- b) Ensuring that individual units are functioning correctly
- c) Validating user requirements
- d) Identifying performance bottlenecks

Solution: b) Ensuring that individual units are functioning correctly

2. Which of the following is NOT a benefit of Unit Testing?

- a) Early detection of defects
- b) Facilitating easier debugging
- c) Ensuring end-to-end functionality
- d) Supporting code refactoring

Solution: c) Ensuring end-to-end functionality

3. What is typically used as a test driver in Unit Testing?

- a) A stub
- b) A mock object
- c) The actual unit being tested
- d) A test framework

Solution: d) A test framework

4. In Unit Testing, what does a stub represent?

- a) A test data repository
- b) A fake implementation of a dependent component

- c) A small unit of code that is being tested
- d) A code coverage report

Solution: b) A fake implementation of a dependent component

5. What is the primary focus of Unit Testing?

- a) Testing interactions between multiple units
- b) Validating the overall system functionality
- c) Identifying performance bottlenecks
- d) Testing individual units in isolation

Solution: d) Testing individual units in isolation

6. Which statement best describes Test-Driven Development (TDD)?

- a) Writing unit tests after implementing the code
- b) Writing unit tests before implementing the code
- c) Writing unit tests only for critical components
- d) Writing unit tests after integration testing

Solution: b) Writing unit tests before implementing the code

7. Which technique is used to ensure that a Unit Test produces consistent and reliable results?

- a) Stubbing
- b) Mocking
- c) Test Fixture
- d) Test Driven Development

Solution: c) Test Fixture

8. What is the purpose of a code coverage analysis in Unit Testing?

- a) Identifying performance bottlenecks
- b) Ensuring that all code paths are tested
- c) Creating test data

d) Monitoring resource utilization

Solution: b) Ensuring that all code paths are tested

9. Which type of bug is Unit Testing most effective at catching?

- a) User interface bugs
- b) Integration bugs
- c) Algorithmic bugs
- d) System configuration bugs

Solution: c) Algorithmic bugs

10. Which of the following is a key characteristic of good unit tests?

- a) High coupling with other units
- b) Testing multiple units together
- c) Independence from external dependencies
- d) Relying solely on manual testing

Solution: c) Independence from external dependencies