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