Each Question has multiple choice answers and carries 2 marks
Attempt all questions and mark the correct answers.

1. What are the issues and challenges in waterfall model of SDLC?
    a. Managing change in the requirements
    b. Testing of code
    c. Frequent delivery and update
    d. Design issues

2. What is Gold Plating in coding?
    a) Gold Plating is working on a task beyond the point where the extra effort is worth any value it adds.
    b) Writing complicated code
    c) Making user interfaces visually appealing
    d) Work which adds little or no value

3. When the TDD practices should be applied to a project?
    a. For high budget project
    b. For projects which has requirements evolving over time.
    c. For projects which has requirements fixed and no change expected.
    d. The project to be show cased in steps.

4. The difference between unit and integration test.
    a. The unit test is white box and integration test is black box testing
    b. There should not be failures in integration test
    c. The unit test is unnecessary while the integration test is mandatory
    d. The integration test is conducted every time the application is built.

5. What are user acceptance tests?
    a) Tests to verify that every functional requirement has been implemented
    b) Testing that the user interface works
    c) Testing that system components works together

6. What is Test Driven Development?
    a. The tests are written after the code is developed.
    b. The application requirements drive the test cases
    c. Test first approach.
    d. Every test should succeed at first time only

7. In TDD, How the application code matches just the minimum required for the application?
    a. The requirements are correctly understood by the team
    b. The test cases are derived from the requirements and code fulfills the test cases.

c. There is never any failure in TDD
d. The code coverage ensures just the bare minimum code

8. In TDD who should define the unit test cases?
    a) The developer
    b) Product QA Tester
    c) Business Owner
    d) The Manager

9. What should be the main consideration when writing code under TDD?
    a) Adding checks for possible bad values
    b) Writing the most efficient code
    c) Write the minimum code to pass the test
    d) Allowing for future expansion

10. What is assertion in test case?
    a) Positively assert the unit code
    b) Verifies the result values and throws error in case of NOT matching.
    c) Controls the unit flow.
    d) Process of assertive locking

11. What is a fake in testing?
    a) A test double which returns fixed values just to make the test success
    b) A mocking framework
    c) A full implementation not suitable for production
    d) A test double which verifies how many times a method is called

12. What is TDD cycle?
    a) Every Test has first time failure
    b) Test-Implementation -Test.
    c) Test Failure- Implementation -Test Success-Refactor-Test
    d) TDD is just a single stage of development.
    a. Red-Green-Refactor

13. What is code refactoring?
    a) Restructure the code to match the new requirements
    b) Restructure the code without changing the external functional behavior
    c) Refactoring is done before writing any test cases.
    d) Refactoring is done to improve code maintenance

14. Mark true of these
    a) For every function code there should be only one test case
    b) In One test case multiple behaviors are tested
    c) The Test cases are dependent on each other for execution
    d) Component under test is shared across all test cases.

15. What is true of these?
    a) Every test case should test for success only
    b) The test cases run in sequence during test execution
    c) The unit test cases are part of application delivery to client.
    d) Each of the test cases must verify the unit behavior one by one

16. What of these is valid?
    a. TDD cannot be implemented for legacy code.
    b. The database can be developed in TDD manner.
    c. In TDD, steps should always be small.
    d. The TDD process increases the developer confidence.

17. What is the advantage of TDD?
    a) The TDD makes the development incremental and iterative
    b) The TDD can be applied to legacy code.
    c) TDD increases the code coverage.
    d) The TDD increases the flexibility of code to match the changes.

18. What is the use of mock objects in testing?
    a) It mocks frequently and is very funny.
    b) The mocking allows testing of the code in absence of dependencies.
    c) The mock objects allow verifying the behavior.
    d) Mocks are used in production code.

19. What is valid for agile test cases..?
    a. The test cases must be mapped to requirements
    b. The test cases should be running in sequence
    c. The test may verify non-functional behavior
    d. The test automation increases efficiency
    e. Each test case should verify only one behavior

20. The BDD and TDD difference

    a) TDD supports unit test cases.
    b) BDD is complete different than TDD
    c) BDD is an extension of TDD to support Acceptance TDD
    d) The TDD does not support BDD criteria

21. What do code quality tools do?
    a) Static analysis of source code
    b) Check for compilation errors

c) Translate one language into another
d) *Debug code*
d) Testing user interface usability

22. What advantage does Continuous Integration provide?
    a) It simplifies the build process
    b) It stops developers checking in bad code
    c) Build errors are quickly detected and reported
    d) There are no real advantages

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