**Software Testing**

Q1) If there are 3 alternate paths for a use case, minimum how many test cases are needed for coverage?

3

4

5

6

Q2) How do you ensure test coverage?

By having more count of test cases

By testing all test cases

By mapping test cases to requirement and making test case for missing ones

By having experienced testers

Q3) A project needs 20% of coding effort as test execution effort and 80% of that as test case preparation. If coding effort is 100PD (person days) , what is total test effort?

40 PD

20 PD

36 PD

50 PD

Q4) If reviews took 5 days and testing 20 days with 3 and 5 people working respectively and UAT had 5 days with 2 people , then what is the cost of quality in PD(person days)?

15 PD

100 PD

115 PD

125 PD

Q5) A software product is to be tested in 5 OS and 3 databases. How many correct test cases combinations are required?

Boundary value 5 sets

Orthogonal array 15 sets

Equivalence partitioning 5 sets

Orthogonal array 5 sets

**Software Testing Methodologies**

Q1) Your application consists of 3 modules. You have developed one of the modules and want to test it. However, few of its functionalities are dependent on the other modules which have not been developed yet. In this case, the other modules can be replaced by stubs and drivers as required. Identify the kind of testing used in this scenario.

Unit testing

System testing

Integration testing

Component testing

Q2) Model based testing (MBT) is integrated into the test process with different input and output artifacts according to the information and abstraction level. What are the output artifacts involved?

1. Test planning and control
2. Test analysis and design
3. Test implementation and execution
4. Evaluation of exit criteria and reporting
5. Test closure activities
6. Test strategy
7. The test basis including requirement and other test targets , test conditions and existing designs or models
8. Incident and defect reports, test logs and test execution logs from previous test execution activities.
9. Method and process guidelines, tool documents
10. MBT models
11. Parts of the test plan, test schedule and test metrics
12. Test scenarios, test suites, test execution schedules and test design specifications
13. Test cases, test procedure specifications, test data, test scripts and test adaptation layer
14. Bidirectional traceability report between generated tests and the test basis
15. Determine if test environment needs archiving in order to take back-ups
16. Verify the network configuration
17. Identify the required server operating system , databases and other components
18. Identify the number of license required by the test team

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3. Incident and defect reports, test logs and test execution logs from previous test execution activities.
4. Method and process guidelines, tool documents
5. Test planning and control
6. Test analysis and design
7. Test implementation and execution
8. Evaluation of exit criteria and reporting
9. Test closure activities
10. MBT models
11. Parts of the test plan, test schedule and test metrics
12. Test scenarios, test suites, test execution schedules and test design specifications
13. Test cases, test procedure specifications, test data, test scripts and test adaptation layer
14. Bidirectional traceability report between generated tests and the test basis, especially requirements and defect reports
15. Determine if test environment needs archiving in order to take back-ups
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Q4) You need to perform regression testing before delivering a change request for an application. What are the basis on which you will select test cases for the same?

1. All the test cases that were created in the design phase
2. Test cases with least usable functionalities as you might skip those while doing E2E testing
3. Test cases with least defects
4. All the passed test cases again
5. All the test cases suggested by BA & development
6. Need to check client priority test cases
7. All integration test cases
8. All unit test cases
9. Only need to run automation test suite
10. Need to run most stable test case to generate good report to client
11. All smoke test scenarios
12. All complex test cases
13. Boundary value test cases
14. Test cases which have frequent defects
15. Functionalities which are more visible to the users
16. Test cases which verify core features of the product
17. Test cases of functionalities which have undergone more and recent changes
18. All integration test cases
19. Boundary value test cases
20. A sample of failure test cases

Q5) What are the objectives of Load/Performance testing?

1. Evaluate performance acceptance criteria
2. Identify critical scenarios
3. Design workload model
4. Identify the target load levels
5. Design the tests
6. Execute tests
7. Analyze the results
8. Integration response
9. Server response
10. Storage
11. Database response
12. Test output generation time
13. Response time
14. Throughput
15. Resource utilization
16. Maximum user load
17. Business related metrics