# 

**Software Testing**

**Exam**

###### Time allowed: 30 Minutes

##### 30 QUESTIONS

| **Question** | |
| --- | --- |
|  | **NOTE: Only one answer per question** |
| 1 | **We split testing into distinct stages primarily because:**   1. Each test stage has a different purpose. 2. It is easier to manage testing in stages. 3. We can run different tests in different environments. 4. The more stages we have, the better the testing. |
| 2 | **Which of the following is likely to benefit most from the use of test tools providing test capture and replay facilities?**   1. Regression testing 2. Integration testing 3. System testing 4. User acceptance testing |
| 3 | **Which of the following requirements is testable?**   1. The system shall be user friendly. 2. The safety-critical parts of the system shall contain 0 faults. 3. The response time shall be less than one second for the specified design load. 4. The system shall be built to be portable. |
| 4 | **Which of the following is NOT true of test coverage criteria?**   1. Test coverage criteria can be measured in terms of items exercised by a test suite. 2. A measure of test coverage criteria is the percentage of user requirements covered. 3. A measure of test coverage criteria is the percentage of faults found. 4. Test coverage criteria are often used when specifying test completion criteria. |
| 5 | **In prioritising what to test, the most important objective is to:**   1. find as many faults as possible. 2. test high risk areas. 3. obtain good test coverage. 4. test whatever is easiest to test. |
| 6 | **Which one of the following statements about system testing is NOT true?**   1. System tests are often performed by independent teams. 2. Functional testing is used more than structural testing. 3. Faults found during system tests can be very expensive to fix. 4. End-users should be involved in system tests. |
| 7 | **Which of the following is false?**   1. Incidents should always be fixed. 2. An incident occurs when expected and actual results differ. 3. Incidents can be analysed to assist in test process improvement. 4. An incident can be raised against documentation. |
| 8 | **Enough testing has been performed when:**   1. time runs out. 2. the required level of confidence has been achieved. 3. no more faults are found. 4. the users won’t find any serious faults. |
| 9 | **Which of the following is NOT true of incidents?**   1. Incident resolution is the responsibility of the author of the software under test. 2. Incidents may be raised against user requirements. 3. Incidents require investigation and/or correction. 4. Incidents are raised when expected and actual results differ. |
| 10 | **Which of the following is not described in a unit test standard?**   1. syntax testing 2. equivalence partitioning 3. stress testing 4. modified condition/decision coverage |
| 11 | **Which of the following is false?**   1. In a system two different failures may have different severities. 2. A system is necessarily more reliable after debugging for the removal of a fault. 3. A fault need not affect the reliability of a system. 4. Undetected errors may lead to faults and eventually to incorrect behaviour. |
| 12 | **How would you estimate the amount of re-testing likely to be required?**   1. Metrics from previous similar projects 2. Discussions with the development team 3. Time allocated for regression testing 4. a & b |
| 13 | **Which of the following is true of the V-model?**   1. It states that modules are tested against user requirements. 2. It only models the testing phase. 3. It specifies the test techniques to be used. 4. It includes the verification of designs. |
| 14 | **Which of the following characterises the cost of faults?**   1. They are cheapest to find in the early development phases and the most expensive to fix in the latest test phases. 2. They are easiest to find during system testing but the most expensive to fix then. 3. Faults are cheapest to find in the early development phases but the most expensive to fix then. 4. Although faults are most expensive to find during early development phases, they are cheapest to fix then. |
| 15 | **Which of the following should NOT normally be an objective for a test?**   1. To find faults in the software. 2. To assess whether the software is ready for release. 3. To demonstrate that the software doesn’t work. 4. To prove that the software is correct. |
| 16 | **Which of the following is a form of functional testing?**   1. Boundary value analysis 2. Usability testing 3. Performance testing 4. Security testing |
| 17 | **Which of the following would NOT normally form part of a test plan?**   1. Features to be tested 2. Incident reports 3. Risks 4. Schedule |
| 18 | **Data flow analysis studies:**   1. possible communications bottlenecks in a program. 2. the rate of change of data values as a program executes. 3. the use of data on paths through the code. 4. the intrinsic complexity of the code. |
| 19 | **In a system designed to work out the tax to be paid: An employee has £4000 of salary tax free. The next £1500 is taxed at 10% The next £28000 is taxed at 22% Any further amount is taxed at 40% To the nearest whole pound, which of these is a valid Boundary Value Analysis test case?**   1. £1500 2. £32001 3. £33501 4. £28000 |
| 20 | **An important benefit of code inspections is that they:**   1. enable the code to be tested before the execution environment is ready. 2. can be performed by the person who wrote the code. 3. can be performed by inexperienced staff. 4. are cheap to perform. |
| 21 | **Which of the following is the best source of Expected Outcomes for User Acceptance Test scripts?**   1. Actual results 2. Program specification 3. User requirements 4. System specification |
| 22 | **What is the main difference between a walkthrough and an inspection?**   1. An inspection is lead by the author, whilst a walkthrough is lead by a trained moderator. 2. An inspection has a trained leader, whilst a walkthrough has no leader. 3. Authors are not present during inspections, whilst they are during walkthroughs. 4. A walkthrough is lead by the author, whilst an inspection is lead by a trained moderator. |
| 23 | **Which one of the following describes the major benefit of verification early in the life cycle?**   1. It allows the identification of changes in user requirements. 2. It facilitates timely set up of the test environment. 3. It reduces defect multiplication. 4. It allows testers to become involved early in the project. |
| 24 | **Integration testing in the small:**   1. tests the individual components that have been developed. 2. tests interactions between modules or subsystems. 3. only uses components that form part of the live system. 4. tests interfaces to other systems. |
| 25 | **Static analysis is best described as:**   1. the analysis of batch programs. 2. the reviewing of test plans. 3. the analysis of program code. 4. the use of black box testing. |
| 26 | **Alpha testing is:**   1. post-release testing by end user representatives at the developer’s site. 2. the first testing that is performed. 3. pre-release testing by end user representatives at the developer’s site. 4. pre-release testing by end user representatives at their sites. |
| 27 | **A failure is:**   1. found in the software; the result of an error. 2. departure from specified behaviour. 3. an incorrect step, process or data definition in a computer program. 4. a human action that produces an incorrect result. |
| 28 | **The most important thing about early test design is that it:**   1. makes test preparation easier. 2. means inspections are not required. 3. can prevent fault multiplication. 4. will find all faults. |
| 29 | **Which of the following statements about reviews is true?**   1. Reviews cannot be performed on user requirements specifications. 2. Reviews are the least effective way of testing code. 3. Reviews are unlikely to find faults in test plans. 4. Reviews should be performed on specifications, code, and test plans. |
| 30 | **Test cases are designed during:**   1. test recording. 2. test planning. 3. test configuration. 4. test specification. |

|  |  |
| --- | --- |
| lf Marking Tick Sheet | |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |
| 21 |  |
| 22 |  |
| 23 |  |
| 24 |  |
| 25 |  |
| 26 |  |
| 27 |  |
| 28 |  |
| 29 |  |
| 30 |  |