**Chap2**

**Software Development Life Cycle Model?**

**Test Level**

**Test Type**

**Question #1**

**Which one of the following is the BEST definition of an incremental development model?**

1. Defining requirements, designing software and testing are done in phases where in each phase a piece of the system is added
2. A phase in the development process should begin when the previous phase is complete
3. Testing is viewed as a separate phase which takes place after development has been completed
4. Testing is added to development as an increment

**Question #2**

**Given that the testing being performed has the following attributes:**

* **Based on interface specifications**
* **Focused on finding failures in communication**
* **The test approach uses both functional and structural test types**

**Which of the following test levels is MOST likely being performed?**

1. Acceptance testing
2. Integration testing
3. System testing
4. Component testing

**Question #3**

**A product owner says that your role as a tester on an Agile team is to catch all the bugs before the end of each iteration. Which of the following is a testing principle that could be used to respond to this (false) statement?**

1. Defect clustering
2. Testing shows the presence of defects
3. Absence of error fallacy
4. Root cause analysis

**Question #4**

**You are running a performance test with the objective of finding possible network bottlenecks in interfaces between components of a system. Which of the following statements describes this test?**

1. A functional test during the integration test level
2. A non-functional test during the integration test level
3. A functional test during the component test level
4. A non-functional test during the component test level

**Question #5**

**Which of the following statements about test types and test levels is CORRECT?**

1. Functional and non-functional testing can be performed at system and acceptance test levels, while white-box testing is restricted to component and integration testing
2. Functional testing can be performed at any test level, while white-box testing is restricted to component testing
3. It is possible to perform functional, non-functional and white-box testing at any test level
4. Functional and non-functional testing can be performed at any test level, while white-box testing is restricted to component and integration testing

**Question #6**

**Which of the following is a test type?**

1. Unit testing
2. Functional testing
3. System testing
4. Acceptance testing

**Question #7**

**Beta testing is**

1. performed by roles outside the development organization at developer’s test environment
2. performed by roles outside the development organization at an external site
3. performed by independent test team
4. useful to test software developed for a specific customer or user

**Question #8**

**In waterfall model, testing phase will be performed after:**

1. implementation phase
2. analysis phase
3. design phase
4. maintenance phase

**Question #9**

**Non-functional testing include**

1. testing to see where the system does not function correctly
2. testing the quality attributes of the system include reliability and usability
3. gaining user approval for the system
4. testing a system feature using only the software required for that function

**Question #10**

**Which of these is a functional test**

1. Measuring response time on an online booking system
2. Checking the effect of high volumes of traffic in a call-center system
3. Checking the online booking screen information and the database contents against the information on the letter to the customers
4. Checking how easy the system is to use

**Question #11**

**Which of these is NOT a test level**

1. Unit test
2. System test
3. Maintenance test
4. Integration test

**Question #12**

**Integration test is performed:**

1. after performing Unit test
2. after performing System test
3. after performing UAT test
4. at any time

**Question #13**

**Regression testing should be performed:**

**v) every week**

**w) after the software has changed**

**x) as often as possible**

**y) when the environment has changed**

**z) when the project manager says**

1. v & w are true, x – z are false
2. w, x & y are true, v & z are false
3. w & y are true, v, x & z are false
4. w is true, v, x y and z are false
5. all of the above are true

**Question #14**

**The main focus of acceptance testing is:**

1. finding faults in the system
2. ensuring that the system is acceptable to all users
3. testing the system with other systems
4. testing for a business perspective
5. testing by an independent test team

**Question #15**

**Consider the following rule: “for every SDLC activity there is a corresponding test activity”. In which SDLC models does this rule hold?**

1. Only in sequential SDLC models
2. Only in iterative SDLC models
3. Only in iterative and incremental SDLC models
4. In sequential, incremental, and iterative SDLC models

**Question #16**

​​**Which types of failures (1-4) fit which test levels (A-D) BEST?**

**1. Failures in system behavior as it deviates from the user’s business needs**

**2. Failures in communication between components**

**3. Failures in logic in a module**

**4. Failures in not correctly implemented business rules**

**A. Component testing**

**B. Component integration testing**

**C. System testing**

**D. Acceptance testing**

1. 1D, 2B, 3A, 4C
2. 1D, 2B, 3C, 4A
3. 1B, 2A, 3D, 4C
4. 1C, 2B, 3A, 4D

**Question #17**

**How can white-box testing be applied during user acceptance testing?**

1. To check if large volumes of data can be transferred between integrated systems
2. To check if all code statements and code decision paths have been executed
3. To check if all work process flows have been covered
4. To cover all web page navigations

**Question #18**

**Which of the following statements comparing component testing and system testing is TRUE?**

1. Component testing verifies the functionality of software modules, program objects, and classes that are separately testable, whereas system testing verifies interfaces between components and interactions between different parts of the system
2. Test cases for component testing are usually derived from component specifications, design specifications, or data models, whereas test cases for system testing are usually derived from requirement specifications or use cases
3. Component testing only focuses on functional characteristics, whereas system testing focuses on functional and non-functional characteristics
4. Component testing is the responsibility of the testers, whereas system testing typically is the responsibility of the users of the system

**Question #19**

**Which one of the following is TRUE?**

1. The purpose of regression testing is to check if the correction has been successfully implemented, while the purpose of confirmation testing is to confirm that the correction has no side effects
2. The purpose of regression testing is to detect unintended side effects, while the purpose of confirmation testing is to check if the system is still working in a new environment
3. The purpose of regression testing is to detect unintended side effects, while the purpose of confirmation testing is to check if the original defect has been fixed
4. The purpose of regression testing is to check if the new functionality is working, while the purpose of confirmation testing is to check if the original defect has been fixed

**Question #20**

**Given the following statements about the relationships between software development activities and test activities in the software development lifecycle:**

**1. Each development activity should have a corresponding testing activity**

**2. Reviewing should start as soon as final versions of documents become available**

**3. The design and implementation of tests should start during the corresponding development activity**

**4. Testing activities should start in the early stages of the software development lifecycle**

**Which of the following CORRECTLY shows which are true and false?**

1. True – 1, 2; False – 3, 4
2. True – 2, 3; False – 1, 4
3. True – 1, 2, 4; False – 3
4. True – 1, 4; False – 2, 3

**Question #21**

**Which of the following statements is true?**

1. Impact analysis is useful for confirmation testing during maintenance testing
2. Confirmation testing is useful for regression testing during system design
3. Impact analysis is useful for regression testing during maintenance testing
4. Confirmation testing is useful for impact analysis during maintenance testing

**Question #22**

**Consider the following types of defects that a test level might focus on:**

1. **Defects in separately testable modules or objects**
2. **Not focused on identifying defects**
3. **Defects in interfaces and interactions**
4. **Defects in the whole test object**

**Which of the following list correctly matches test levels from the Foundation syllabus with the defect focus options given above?**

1. 1 = performance test; 2 = component test; 3 = system test; 4 = acceptance test
2. 1 = component test; 2 = acceptance test; 3 = system test; 4 = integration test
3. 1 = component test; 2 = acceptance test; 3 = integration test; 4 = system test
4. 1 = integration test; 2 = system test; 3 = component test; 4 = acceptance test

**Question #23  
Test harness**

1. A test environment comprised of stubs and drivers needed to execute a test
2. A set of several test cases for a component or system under test, where the post condition of one test is often used as the precondition for the next one.
3. Any event occurring that requires investigation
4. A chronological record of relevant details about the execution of tests

**Question #24**

**A mass market operating system software product is designed to run on any PC hardware with an x86-family processor. You are running a set of tests to look for defects related to support of the various PCs that use such a processor and to build confidence that important PC brands will work. What type of test are you performing?**

1. Performance test
2. Processor test
3. Functional test
4. Portability test

**Question #25  
Which of following is correct:**

1. **\_\_\_\_\_\_delivers working software which is a growing subset of the overall set of features until the final software is delivered or development is stopped**
2. **\_\_\_\_\_\_produces working versions of parts of the system early on & each of these can be released to the customer**
3. **Each iteration**
4. **Incremental development**
5. 1-B; 2-A
6. 1-A; 2-B