**Đề 1\_đáp án**

1. **Which of the following alternative describes NOT a major task of test implementation?...[K2].**
2. **Executing tests either manually or by using test execution tools.**
3. Developing and prioritizing test procedures, and, potentially, creating automated test scripts.
4. Creating test suites from the test procedures and (if any) automated test scripts.
5. Preparing test data and ensuring it is properly loaded in the test environment.
6. **Which of the following alternatives describes fundamental test process?[K1]**
7. Test planning - Test monitoring and control -Test analysis - Test design - Test implementation - Test execution - Test exit
8. Test planning - Test progress control - Test analysis - Test design - Test implementation - Test execution - Test completion
9. Test planning - Test monitoring - Test analysis - Test design - Test implementation - Test execution - Test completion
10. **Test planning - Test monitoring and control - Test analysis - Test design - Test implementation - Test execution - Test completion**
11. **Which of the following statement describes correctly about software testing terms for problem in software?[K1]**
12. **Errors or mistakes result in faults, which, when executed, may result in failures.**
13. Errors result in failures which, when executed, may result in incidents.
14. Human failures may result in defects, which, when executed, will result in incidents.
15. Problems during analysis and design may result in errors, which during execution may result in failures.
16. **Which of following alternative describes a general testing principle…**
17. Defects are evenly distributed through the system.
18. **Repeating the same test cases over again in new versions of the software finds less and less defects.**
19. Testing can prove that there are no defects
20. If testing shows no defects, then the system is useful.
21. **Which of the following statements contains a valuable objective for a test team?**
22. The goal is to fulfill all testing activity requirements as specified in the project handbook.
23. **The goal is to cause as many failures as possible so that faults can be identified and corrected.**
24. The goal is to prove that all faults are identified.
25. The goal is to prove that failures may not be caused any more by the remaining defects
26. **You are running a written test which other testers have run previously. In addition, this test has found bugs previously, and those bugs have been confirmed to be fixed. The test manager has encouraged you to the specific way in which you run the test, such as the order of certain actions, use of mouse versus hot-keys, and the particular input values, based on the way users will use in the system. Which of the following is a testing principle that could explain the test manager’s directive?**
27. Early testing
28. **Absence –of –errors fallacy**
29. Random testing
30. Pesticide paradox

**Question about “Testing in the Software Lifecycle”**

1. **Which goal is usually NOT part of component testing?**
2. Testing correct functionality of the component
3. **Testing correct interactions between component**
4. Testing completeness of the component’s functionality
5. Testing robustness of the component

1. **Which of alternatives describes the reasons of why there are different level of testing?**

A. Because every test level has a definite task and should concern the typical defects for that level.

B. Because the test levels are executed by different personnel

C. Because defects can be found earlier by testing in many levels

D. Because execution of the earlier test levels tends to reduce over of later test levels with too many bugs

E. In order to make project planning and follow-up easier, the testing objects are divided into test levels

1. A and B are true; C,D and E are false
2. **A,C and D are true; B and E are false**
3. B,C and D are true; A and B are false
4. C,D and E are true; A and B are false
5. **The following descriptions are related to acceptance testing. Which of the following alternative describes NOT true?**
6. Site acceptance testing is to determine whether or not a component or system satisfies the user/customer needs and fits within the business process, normally including hardware as well as software.
7. Acceptance testing is formal testing with respect to users needs, requirements, and business processes conducted to determine whether or not a system satisfies the acceptance criteria and to enable the user, customers or other authorized entity to determine whether or not to accept the system.
8. User acceptance testing verifies the fitness for use of the system and usability of business perspective.
9. **Regulation acceptance testing is verifies the fitness for use of the system and usability of business perspective.**
10. Regulation acceptance testing is performed against any regulations that must be adhered to, such as governmental, legal or safety regulations.
11. **Which of the following alternative describes the main difference between “system testing” and “Acceptance testing”?**
12. System testing is done on the development platform, while acceptance testing is done on the customer platform
13. **System testing is done against the developers’ interpretation of the requirements, acceptance testing against customer understanding.**
14. System testing concentrates on functional testing, while acceptance testing concentrates on nonfunctional testing.
15. Acceptance testing is a regression test for the changes implemented during system testing.
16. **Which of following is correct about regression testing? [K2]**
17. **During regression test a part of the already executed tests are repeated after the unit, build or system under test is modified, in order to check that the changes have NOT created new defects**
18. During regression test all already executed tests are repeated after the unit, build or system under test is modified in order to assure that changes of the test object have NOT created new defect
19. During regression test a part of the already executed tests are repeated after the unit, build or system under test is modified in order to check if the defects found so far are corrected
20. During regression test a part of the already executed tests are repeated after the unit, build or system under test is modified in order to check if the defected found so far are corrected
21. **In which testing level should performance be tested?**
22. Performance may be tested in earlier test levels than system testing.
23. **Performance should be tested in system testing.**
24. Performance must be tested in system and acceptance testing.
25. Performance must be tested in every test level
26. **Which of the following alternative describes about “System test”**
27. System test only checks functional requirements. Nonfunctional requirements shall be validated in a review.
28. System testing only checks nonfunctional requirements. Functional requirements shall be validated in a review
29. **System testing checks functional as well as nonfunctional requirements.**
30. System testing check only requirements specified in the requirements specification.
31. **When should structural testing be used?**
32. Structural testing should be used in component testing.
33. **Structural testing can be used in any test level. However, structural techniques are best used after specification based techniques.**
34. Structural testing should be used mainly in integration testing to verify if the structure of the product is sound and robust. Additional, it may be applied in later test levels.
35. Structural testing must be used in component testing but may be used later test levels.
36. **Which of the following test aspects is important for “maintainability” described in ISO 9126 Standard?**
37. Memory use
38. Response time
39. **Modularity**
40. Robustness

**Question about “ Static Testing”**

1. **Which of the statements about reviews are correct?**
2. **Any type of Reviews can help find bugs early resulting in savings of cost.**
3. It is wise to exclude testers in review of specifications because it can bias them
4. Reviews are useful because they help management to assign responsibility of failure of individual developers.
5. Requirement of additional time for reviews is likely to result in longer development cycle.
6. **Which of following review types has its purpose of learning, gaining understanding and finding defect? [K2]**
7. Informal
8. **Walkthrough**
9. Technical review
10. Inspection
11. **If you are test Manager, what is a main task in Review activity?**
12. **Main task is to make sure review take place and that the participants have time to prepare and attend.**
13. Main task is to check that the participantsprepare well enough during individual preparation for a review.
14. Main task is to check that the documents fulfill the previously agreed upon rules and standards.
15. Main task is to choose the moderator to lead the review and follow up moderator performance and training.
16. **Which of the following is a difference between the contents of a test case specification and a test procedure specification?**
17. The test procedure specification is used only for automated test execution
18. The two terms are synonyms and have exactly the same contents
19. The test case specification specifies the sequence of action for the execution of a test.
20. **The test procedure specification specifies the sequence of action for the execution of a test**
21. **Which of the following describes NOT related with testing objective? [K1]**
22. Gaining confidence about the level of quality
23. Providing information for decision –making
24. Preventing defects
25. **Making a zero defect Software**
26. **With the help of testing, It is possible to measure the quality of software in terms of defects found for both functional and non-functional software requirements and characteristics (e.g., reliability, usability, efficiency, maintainability and portability). Which of following international standards describe on software characteristics? [K1]**
27. IEEE 829
28. IEEE 1028
29. **ISO 25010 (9126)**
30. ISO 15504
31. **You are working on a project on which any slippage in the test execution completion date would result in financial penalties for your employer. Achieving the planned delivery date is seen as the highest single priority. Which benefit of static techniques is likely to convince management to use them?**
32. Productivity improvements
33. Improved communication within the team
34. Reduced post-release support costs
35. **Reduced testing cost and time.**

**Question about “Dynamic Testing”**

1. **You are testing System Response Time under load testing. What test type are you performing?**
2. Structural
3. Acceptance
4. Functional
5. **Non-functional**
6. **You are brought in as the sole tester at the end of a project. You are were selected because of your understanding of the system and its intended behavior, Users, customers, and other project stakeholders consider the software low-risk. You are give one week to execute tests to see if any show-stopping defects are present.**
7. Specification-based
8. **Experience-based**
9. Structure-based
10. Static testing
11. **Which of the following techniques is considered as a typical structure-based technique?**
12. State transition testing
13. **Decision coverage testing**
14. Boundary value analysis
15. Equivalence partitioning

**[Specification A] The following specification is given for question 26 and 27.**

**Vietnam Railway company runs a train from Ho Chi Minh City to Hanoi. This train has four different kinds of accommodation with different ticket prices: Hard seat, soft seat, hard sleeper, and soft sleepers. For hard sleeper, there are different prices for lower, middle and upper berth. For soft sleeper, there is a different price for lower and upper berth. For sleeping accommodation, different prices apply for non-air-condition and air-condition. For soft sleeper, a higher price applies for compartments with own bathroom. High-speed trains exist, but have only hard and soft seat, and they have another price than “normal” trains.**

1. **In above [Specification A] how many different valid combinations of inputs exist for computing the price?**
2. 36
3. 24
4. **18**
5. 12
6. **In above [Specification A], which of the following testing technique is most likely to be selected to minimize testing effort within limited time frame? Assume that other facts are considered already.**
7. Equivalence Partitioning techniques
8. **Pair Wise Technique and Orthogonal Array Techniques**
9. State Transition Techniques
10. Condition-Decision Coverage Technique
11. **The following program code is given. How many test cases do you need for 100% statement coverage?**

IF (Age>18) THEN

CustomerPotential :=1.000

IF Gender =”Male” THEN

ProductSet:=”Technique”

ELSE

ProductSet:=”Clothes”

END IF

END IF

IF ( Country = “Vietnam”) THEN

International:=”No”

ELSE

International :=”Yes”

END IF

1. 1
2. **2**
3. 3
4. 4
5. **The following rule must be followed when using the equivalence class partitioning method:**
6. **Divides possible inputs into class that have the same behavior**
7. Makes use of only positive test cases for the equivalence partitions
8. Muss always include at least two values from every equivalence partition
9. Can be used only for testing equivalence partitions inputs from a Graphical User Interface
10. **Which of the following is NOT true about Multiple condition coverage?...[K3]**
11. 100% multiple condition coverage implies 100% condition determination coverage
12. In this coverage, all possible combinations of true/false conditions are identified.
13. White box test design technique
14. **The percentage of combinations of all multi condition outcomes within one statement that have been exercised by a test suite**
15. **Which of the following is NOT true about Condition Determination Testing and Coverage?[K3]**
16. **100% decision condition coverage implies 100% condition determination coverage**
17. A white box test design technique in which test cases are independently affect a decision outcome that have been exercised by a test case suite.
18. The percentage of all single condition outcomes that independently affect a decision outcome that have been exercised by a test case suite.
19. The possible combination of true/false conditions that can affect decisions are identified.

1. **Which of the following is Common characteristics of structure-based test design techniques ? [K2]**
2. **Information about how the software is constructed is used to derive the test cases.**
3. Test cases can be derived systematically from these models
4. The knowledge and experience of people are used to derive the test cases
5. Models, either formal or informal, are used for the specification of the problem to be solved, the software or its components

**Question about “Test Management”**

1. **Which of the following alternative describes NOT true about usage of identifying product risks…**
2. **It is used to decide about the tool support for the test.**
3. It is used to determine the test techniques to be used
4. It is used to decide the extent of testing activity
5. It is used to decide what to test early
6. **You are working as the manager of an independent test team. At a project meeting, you are explaining the results of your testing so far. You show the team that, while testing is proceeding productively, it is talking a while to get some critical bugs and test failures resolved. Another manager comments that he is concerned that the test team is delaying the release of the software. Which of the following is a drawback of independent testing illustrated by this manager’s comment?**
7. Independent testers can verify assumptions that other people made
8. **The test team is seen as responsible for the delays**
9. Independent testers see other and different defects, and are unbiased
10. The test team is isolated from the rest of the project team
11. **Which of the following alternative describes about incident management NOT correctly?**
12. Incident management should show product quality through use of metrics.
13. Registration of problems, faults and failures are required to manage incidents
14. **New software requirements should be defined and implemented**
15. Incident management deals to develop of proposals to correct faults.
16. **Which of the following is a way in which configuration management supports testing?**
17. Automatically determines the location of any defects found
18. No benefits; configuration management supports testing
19. **Uniquely identifies the tested item**
20. Ensures that code has been unit tested

**Question about “Test Tool”**

1. **Which of the following alternative describes NOT true about Why test automation often fail?**
2. The automation tool does not support all features in the interface
3. The test script are too difficult to maintain.
4. Learning effort for the test tool scripting language is too high
5. **There are not enough tool licenses available**
6. **You are currently engaged in working as a test manager on a large program. You anticipate a large number of defects in the system. What kind of tool support might be helpful to you as a manager?**
7. Test execution
8. Test comparator
9. Static analysis
10. **Incident management**
11. **Which of the following alternative describes the success factors for deployment for testing tool into your organization?**
12. Should spend most of time for Testing tool Evaluating
13. Implementing the new tool in rapidly will ensure and helpful
14. Tool deployment is recommended to define a test process in parallel
15. **Required to provide training and coaching for new users**
16. **Which of the following terms is used, when the developers are releasing code for testing that is not version controlled? [K2]**
17. Incident management
18. **Configuration management**
19. Test monitoring
20. Risk management