**Đề 5\_đáp án**

1. **Place the stages of the Fundamental test process in the usual order ( by time)…. [K2]**
2. Test closure activities
3. Analysis and design
4. Planning and control
5. Implementation and execution
6. iii, iv, ii, i
7. iii, ii, i, iv
8. **iii, ii, iv, i**
9. ii, iii, iv, i
10. **One approach to “this testing” is to prepare and automate test cases before coding. This is called a test-first approach or test-driven development. What is this testing? [K1]**
11. **Component testing**
12. Integration testing
13. System testing
14. Acceptance testing
15. **What should testing be focused on?...[K1]**
16. **The defined testing objectives**
17. Finding as many defects as possible
18. Meeting the project deadlines
19. Giving confidence that the system will work for the users
20. **The testing mind set is not one that…[K2]**
21. Looks for problems in product under test and tries to find defects.
22. Is self critical and looks for errors and defects in one’s own work.
23. Is sensitive to others and diplomatic when giving and receiving criticism
24. **Looks only for tests that show the system works**
25. **Which one of the following describes best the difference between testing and debugging?...[K3]**
26. **Testing shows failures that are caused by defects. Debugging finds, analyzes, and removes that causes of failures in the software.**
27. Testing find defects. Debugging analyzes the faults and proposes preventive activity..
28. Testing removes faults. Debugging identifies the causes of failures.
29. Dynamic testing prevents causes of failures. Debugging removes the failures.

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

1. **Which of these statements about maintenance testing is untrue?... [K2]**
2. Maintenance testing includes assessment of the risk of change
3. Maintenance testing can be difficult if specifications are poor, missing or out of date
4. Impact analysis can be difficult when assessing which regression tests to run
5. **Maintenance is easier than development, so maintenance testing is easier than development testing.**
6. **Which of the following is a test level?...[K1]**
7. Functional testing
8. **System testing**
9. Testing of software structure
10. Non-functional testing
11. **Which of the following is a test type?...[K1]**
12. Component testing
13. **Regression testing**
14. System testing
15. Acceptance testing
16. **Which of the following is a not a quality characteristic?...[K2]**
17. **Feasibility**
18. Usability
19. Portability
20. Resource utilization
21. **Which is incorrect about success factors for reviews ?**
22. Each review has clear predefined objectives
23. The right people for the review objectives are involved
24. **Testers should not involve reviewing document.**
25. Defects found are welcomed and expressed objectively
26. **Match the following inspection roles and responsibilities….[K3]**

**Roles**

**1.Moderator ,**

**2. Recorder ,**

**3.Reviewer ,**

**4. Manager**

Responsibilities

1. The person chosen to represent a certain viewpoint
2. The person who decide on the execution of inspections
3. The person who leads the process
4. The person who documents all the issues
5. 1-ii, 2-iv, 3-i, 4-iii
6. **1-iii, 2-iv, 3-i, 4-ii**
7. 1-ii, 2-i, 3-iv, 4-iii
8. 1-iii, 2-i, 3-iv, 4-ii
9. **What statement about reviews is true? ….[K2]**
10. **Inspections are led by a trained moderator, where informal technical reviews not necessarily**
11. In a walkthrough the author does not attend
12. A walkthrough will not have a separate scribe
13. Technical reviews are led by a trained leader, inspections are not
14. **Which one of the following examples describes a typical benefit of static analysis supported by tools? ...[K3]**
15. Static analysis supported by tools prevents business analysts and requirement engineers building software models (e.g. state transition diagrams), which do not match the requirements.
16. **Static analysis supported by tools may find defects prior to manual test execution**
17. By using static analysis tools user acceptance testing can be shortened because the users need to execute less tests.
18. By performing static analysis of the code supported by tools the need for the developers doing unit testing is decreased.
19. **What state about static analysis is true…[K2]**
20. Compiling is not a form of static analysis
21. When properly performed, it makes functional testing redundant.
22. **With static analysis defects can be found, that are difficult to find with dynamic testing**
23. Will find all defects
24. **Which list typically describes the defects discovered by a static analysis tool?...[K2]**
25. **Programming standards violations, undefined variables, syntax violations**
26. Interface omissions, spelling defects, design flaws
27. Non-user friendly error messaging, unreferenced variables
28. Unused variables, incorrect warning messages, performance

**Questions about : Dynamic testing”**

1. **A specification says: “If the fossil is Jurassic in origin then it must be catalogued under Mesozoic post Triassic and cross referred to oolitic limestone. If it is a tooth, then it must be catalogued under Dental remains”.**

The tester analyses this for decision table testing and finds the following conditions and actions:

C1: Jurassic

C2: tooth

A1: Catalogue as Mesozoic post Triassic

A2: Cross refer to oolitic limestone

A3: Catalogue as Dental remains

**The decision table will have many test cases?... [K3]**

1. **2**
2. 4
3. 8
4. 16
5. **One of the exit criteria for the project is 100% decision coverage…[K3]**

The following 3 tests have been executed for the control flow graph below.

Test A covers path: A, B, D, F, G

Test B covers path: A, C, F, G

Test C covers path: A, C, F, C, F, F, G

A

G

F

C

B

E

D

**Which of the following statements related to the decision coverage goal is correct?**

1. 100% decision coverage has been achieved
2. **Decision D has not been tested completely**
3. Decision E has not been tested completely
4. Decision F not been tested completely.
5. **Which of the following is NOT a major factor for choosing test design technique?...[K2]**
6. Type of system
7. Regulatory requirements
8. Risk level and type
9. **Test environment**
10. **For a tax system the earnings up and until € 4000 are tax free, the following € 1500 are charged at 10% , the following € 28000 at 20% and the remainder above 40%**

**All value are rounded to € 1.**

**What test case could result from a boundary value analysis?...[K3]**

1. 1500
2. **33501**
3. 4500
4. 28000
5. **For the same case, using equivalence partitioning which three values fall in the same partition?...[K3]**
6. **5600, 28000, 7800**
7. 2800, 4200, 4800
8. 3000, 4500
9. 28000, 50000, 60000
10. **Regression test…[K2]**
11. May usefully be automated if they are well designed
12. Are the same as re-tests
13. Are a way to reduce risk of change having an adverse affect elsewhere in the system
14. **A and C above.**
15. **Expected result for a test should not be derived from…[K3]**
16. **The code, because that describes the system as it is**
17. The specification, because that describes the system as it should be
18. A user with specialized knowledge about the use of the system, because that describes the system that is needed
19. A test oracle, because that describes the system that is needed
20. **Priorities your tests to:…[K2]**
21. Get the areas the programmer is most worried about finished first
22. Get finished within the time and budget available
23. **Ensure that when you stop you have done the best tests in the time available**
24. To ensure as many tests as possible are run
25. **Which of following description on Testing is correct?...[K2]**
26. **Testing is started as early as possible in the life cycle.**
27. Testing is started after the code is written so that we have a system with which to work
28. Testing is most economically done at the end of the lifecycle
29. Testing can an only be done by an independent test team
30. **Which of following is correct about Test Plan? …[K2]**
31. **Written early in the project or software lifecycle, in order to define the risks, budget, team and strategy for testing**
32. A list of test cases with their expected results
33. Never of interest to the programmers
34. A script of test cases which follows the business processes
35. **Which of these is true?...[K3]**
36. Beta tests are carried out by the developer
37. **An integration test checks the interfaces and interactions between the building blocks of a system or group of systems**
38. System tests can only be run by an independent test team
39. Alpha testing is carried out at the users’ site
40. **In a boiler maintenance logging and booking control system, the code to decide whether the boiler is due for a service and add it to the list is written as:**

If today-date-last-service-date > 15 months

Then add boiler-number to service-listing-report

Endif

**How many tests to give 100%statement coverage and tests to give 100% decision coverage?...[K3]**

1. 1 statement test and 4 decision tests
2. 2 statement tests and 4 decision tests
3. 1 statement test and 3 decision tests
4. **1 statement test and 2 decision tests**
5. **A temperature unit keeps the temperature between 10 degrees Centigrade and -10 degrees Centigrade. If the temperature drops below -10 or rises above 10 then an alarm rings. Boundary Value Analysis tests are drawn up. The temperatures to be tested are:…[K3]**
6. **11, 10, 9, -9, -10, -11**
7. 10, -10
8. 11, -11
9. -1, 0, 1
10. 5, 10, 15
11. **What is alpha testing?...[K1]**
12. A pre-release test executed at customers’ site
13. **A pre-release test executed at the developers’ site**
14. A post-release test executed at customers’ site
15. A post-release test executed at developers’ site
16. **Which of the following is a black-box testing technique?...[K1]**
17. Condition Testing
18. Multiple Condition Testing
19. Statement Testing
20. **State Transition Testing**

**Questions about “ Test Management”**

1. **What is a typical task for a tester?...[K2]**
2. Plan the tests
3. Write a test strategy
4. Write test summary reports
5. **Review tests developed by others**
6. **Which of the following is a major task of test planning?...[K1]**
7. Initiation of corrective action
8. Measuring and analyzing results
9. **Determining the exit criteria**
10. Monitoring and documenting progress
11. **Of the following activities, which is the least important within test management?...[K1]**
12. Test estimation
13. Test planning
14. **Defect fixing**
15. Test control
16. **When deciding how much testing to do we must:…[K2]**
17. **Assess the risk and budget, then decide how much time and resources to spend**
18. Always test everything exhaustively
19. Not test if we do not have time-it is just too time consuming
20. Run the easiest tests first.
21. **According to IEEE829, which of the following should be included in a test plan?...[K2]**
22. Test cases
23. **Test approach**
24. Test records
25. Test records
26. **You need to know how your system might respond to large numbers of simulate users. Which of the following tool sets may be the most useful for this purpose?...[K2]**
27. Test replay tool and bug tracking tool
28. Static analysis tool and capture/ playback tool
29. Test design tool and requirements capture tool
30. **Load tool and monitoring tool**
31. **Below you find a list of improvement goals a software development and test organization would like to achieve. Which of these goals for improving the efficiency of test activities would best be supported by a test management tool?...[K3]**
32. **Improve the efficiency by building traceability between requirements, tests, and defects**
33. Improve the efficiency by optimizing the ability of tests to identify failures
34. Improve the efficiency by faster resolving defects
35. Improve the efficiency by automating the selection of test cases for execution.
36. **Which tool is NOT typically a tool that supports test management?...[K2]**
37. Requirements management
38. Incident management
39. **Review process tool**
40. Configuration management
41. **Which tool is NOT typically a tool only used by developer?...[K1]**
42. Static analysis
43. Coverage tooling
44. Dynamic analysis
45. **Incident management**
46. **What can be the risk(s) regarding the usage of tools?...[K2]**
47. Repetitive work is reduced
48. **Over-reliance on the tool and under estimation of costs**
49. Objective measurements
50. Greater consistency and repeatability