

KNOWLEDGE CHECK – CHAPTER 1

1.1 WHY IS TESTING NECESSARY

1 Which one of the following is NOT a possible result of software defects at an airport?

- a) Airline passengers miss their flight because the booking system can't find their ticket. ☐
- b) Because of a rounding error, all flight departure times are wrong. ☐
- c) Luggage is loaded by the conveyor system onto the wrong plane. ☐
- d) Security guards forget to search a passenger's laptop at the security station. ☐

2 One of the following terms describes a source of a defect, for which it holds true that, if it is removed, the occurrence of the defect type is decreased or removed. Which term?

- a) Bug ☐
- b) Defect ☐
- c) Root cause ☐
- d) Vague specification ☐

3 Which of the following terms is another word for a defect in software?

- a) Bug ☐
- b) Failure ☐
- c) Root cause ☐
- d) Vague specification ☐

4 Which of the following terms describes an incorrect action made by, for example, a developer?

- a) Bug ☐
- b) Error ☐
- c) Root cause ☐
- d) Vague specification ☐

5 Which of the following terms describes an incorrect result when software is executed?

- a) Bug ☐
- b) Failure ☐
- c) Root cause ☐
- d) Vague specification ☐

6 Which of the following statements is true?

- a) Defects always result in failure. ☐
- b) Defects and failures are the same thing. ☐
- c) Defects never result in failure. ☐
- d) Defects sometimes result in failure. ☐

7 One of the following statements about testing is NOT true. Which?

- a) It can help reduce the risk of defects. ☐
- b) It can save time, money and even lives. ☐
- c) It is always required by law. ☐
- d) It may be required by law. ☐

8 One of the following statements about testing and quality is true. Which?

- a) Testing does not prove that there are no defects. ☐
- b) Testing increases the risk of defects. ☐
- c) Testing proves that there are no defects. ☐
- d) Testing proves the quality of the software. ☐

9 One of the following statements about testing is true. Which?

- a) It can help reduce the risk of defects. ☐
- b) It is always done by developers. ☐
- c) It is always done by independent testers. ☐
- d) It is always required by law. ☐

1.2 WHAT IS TESTING

10 One of the following statements about development and testing is true. Which?

- a) Testing always takes place before development. ☐
- b) Testing can provide information about software quality. ☐
- c) Testing guarantees quality of software development. ☐
- d) Testing provides information about developer quality. ☐

11 One of the following terms describes the type of testing where the typical objective is to find as many defects as possible and fix them. Which?

- a) Development testing ☐
- b) Maintenance testing ☐
- c) Non-functional testing ☐
- d) Operational acceptance testing ☐

12 One of the following terms describes the type of testing where the typical objective is to see that no new defects have been introduced during development. Which?

- a) Development testing ☐
- b) Maintenance testing ☐
- c) Non-functional testing ☐
- d) Operational acceptance testing ☐

13 Which one of the following is a common test objective?

- a) Analyzing use cases ☐
- b) Improving communication ☐
- c) Gaining confidence in quality ☐
- d) Maintenance testing ☐

14 One of the following terms describes the type of testing where the typical objective is to confirm that the system works as expected, and to gain confidence that it meets the requirements. Which?

- a) Acceptance testing ☐
- b) Development testing ☐
- c) Maintenance testing ☐
- d) Structure-based testing ☐

1.3 SEVEN TESTING PRINCIPLES

15 Which of the following statements about exhaustive testing is correct?

- a) It is recommended for safety-critical software. ☐
- b) It is mandatory. ☐
- c) It is not possible to do for non-trivial software. ☐
- d) It requires a great deal of testing experience. ☐

16 Testing is context-dependent. What does that mean?

- a) Context is critical to executing test scripts. ☐
- b) Safety-critical software is dependent on testing. ☐
- c) Safety-critical software is tested differently than other software. ☐
- d) Testers are assigned to tasks depending on context. ☐

1.4 FUNDAMENTAL TEST PROCESS

17 Which one of the following is NOT an activity in the Fundamental Software Test Process?

- a) Analysis and design ☐
- b) Planning and control ☐
- c) Test closure activities ☐
- d) Test review ☐

18 Choose the missing word of the activity in the Fundamental Test Process: "Analysis and...?"

- a) Closure ☐
- b) Control ☐
- c) Design ☐
- d) Execution ☐

19 Complete this statement: If a well-designed test finds no defects...

- a) ...we have increased the risk of defects. ☐
- b) ...we have not proven that there are no defects. ☐
- c) ...we have proven that there are no defects. ☐
- d) ...we have proven the quality of the software. ☐

20 Checking test logs against criteria specified during test planning is a task of testing. What test process activity is it part of?

- a) Evaluating exit criteria and reporting ☐
- b) Implementing and executing tests ☐
- c) Planning and control ☐
- d) Test closure activities ☐

21 **Checking that deliverables are completed is a task of testing. What test process activity is it part of?**

- a) Evaluating exit criteria and reporting ☐
- b) Implementing and executing tests ☐
- c) Planning and control ☐
- d) Test closure activities ☐

1.5 THE PSYCHOLOGY OF TESTING

22 **One of the following factors is crucial for the general success of testing. Which?**

- a) Clearly stated goals ☐
- b) Debugging skills ☐
- c) The number of actual defects ☐
- d) Tools and hardware ☐

23 **Which of the following skills are most valuable to be a successful tester?**

- a) Communication skills ☐
- b) Debugging skills ☐
- c) Development skills ☐
- d) Leadership skills ☐

24 **Why is independence important in testing?**

- a) An independent tester may be more effective at finding defects missed by the developer. ☐
- b) An independent tester will be more efficient because he/she is less familiar with the software. ☐
- c) An independent tester will find defects more quickly than the developer. ☐
- d) An independent tester will know more about the software than the developer. ☐

25 The advantage of having an independent tester is...

- a) ...that the tester can be more effective at finding defects because of his/her objectivity. ☐
- b) ...that the tester can freely communicate with developers. ☐
- c) ...that the tester has author bias since he/she wrote the code. ☐
- d) ...that the tester has more knowledge about the code than the developer. ☐

1.6 CODE OF ETHICS

26 Which of the following aspects is NOT addressed by the ISTQB code of ethics?

- a) Acting with the public interest in mind ☐
- b) Being supportive of colleagues ☐
- c) Involving the client in test execution ☐
- d) Participating in lifelong learning ☐

27 Providing clear, understandable and useful deliverables that meet the highest professional standards possible is part of which item in the ISTQB code of ethics?

- a) Documentation ☐
- b) Judgment ☐
- c) Management ☐
- d) Product ☐

28 As a tester you choose not to report an issue even though you know there is a risk that it might show up in production and cause major problems for end users. This would be a violation of which item in the ISTQB code of ethics?

- a) Colleagues ☐
- b) Management ☐
- c) Public ☐
- d) Reporting ☐

ANSWER KEYS – CHAPTER 1

Q	Key	Q	Key
1	d)	15	c)
2	c)	16	c)
3	a)	17	d)
4	b)	18	c)
5	b)	19	b)
6	d)	20	a)
7	c)	21	d)
8	a)	22	a)
9	a)	23	a)
10	b)	24	a)
11	a)	25	a)
12	b)	26	c)
13	c)	27	d)
14	a)	28	c)

KNOWLEDGE CHECK – CHAPTER 2

2.1 SOFTWARE DEVELOPMENT MODELS

1 Rapid Application Development and Agile are examples of

- a) Iterative-incremental development models ☐
- b) Sequential development models ☐
- c) Test design models ☐
- d) Test-first development models ☐

2 What is true about general rules for testing in any development model?

- a) All development activities have corresponding test activities. ☐
- b) Development activities need not have a corresponding test activity. ☐
- c) Development objectives should be the same as testing objectives. ☐
- d) Testing should begin before development, and have objectives specific to testing activity. ☐

3 What is true about test design in any development model?

- a) Test design for a test level begins after the corresponding development phase. ☐
- b) Test design for a test level begins before the corresponding development phase. ☐
- c) Test design for a test level begins during the corresponding development phase. ☐
- d) Test design for a test level can begin at any time. ☐

4 What is true about development documents in any development model?

- a) Testers should review documents for acceptance testing as soon as they are available. ☐
- b) Testers should review documents for each level as soon as they are available. ☐
- c) Testers should review documents for integration and system testing as soon as they are available. ☐
- d) Testers should review documents when coding has begun. ☐

5 What is a software development lifecycle model?

- a) A way of creating program code over long periods of time ☐
- b) A way of describing programming skills ☐
- c) A way of grouping all activities associated with development ☐
- d) A way of grouping all documentation associated with development ☐

6 In the V-model, which is the correct sequence of the following documents?

- a) Business vision, use case description, interface design description, component design description ☐
- b) Component design description, business vision, use case description, interface design description ☐
- c) Interface design description, component design description, business vision, use case description ☐
- d) Use case description, business vision, interface design description, component design description ☐

7 What is the V-model?

- a) A graphical representation of an iterative-incremental software development model ☐
- b) A graphical representation of a software development lifecycle ☐
- c) A graphical representation of the fundamental testing process ☐
- d) A model for managing teams of testers and test leaders ☐

2.2 TEST LEVELS

8 Which of the following is NOT a test level?

- a) Acceptance testing ☐
- b) Integration testing ☐
- c) Structural testing ☐
- d) System testing ☐

9 Which of the following is NOT a test level?

- a) Acceptance testing ☐
- b) Component testing ☐
- c) Exploratory testing ☐
- d) Integration testing ☐

10 Which of the following is a test level?

- a) Component testing ☐
- b) Framework testing ☐
- c) Migration testing ☐
- d) Regression testing ☐

11 What is true about test levels?

- a) Each level follows its own test process and all levels share the same objective. ☐
- b) Each level follows its own test process and has its own objectives to fulfil. ☐
- c) Each level follows the same test process and all levels share the same objective. ☐
- d) Each level follows the same test process but has its own objectives to fulfil. ☐

12 What is component testing?

- a) Assessing a system's readiness for deployment and use ☐
- b) Determining if interactions between different parts of a system work ☐
- c) Testing the behaviour of a whole system/product ☐
- d) The process of determining if individual units of source code are fit for use ☐

13 What is test-driven development?

- a) A process where tests are developed first and the code is then written until all tests pass ☐
- b) Determining if interactions between different parts of a system work ☐
- c) Testing the behaviour of a whole system/product ☐
- d) The process of determining if individual units of source code are fit for use ☐

14 What is integration testing?

- a) Assessing a system's readiness for deployment and use ☐
- b) Determining if interactions between different parts of a system work ☐
- c) Testing the behaviour of a whole system/product ☐
- d) The process of determining if individual units of source code are fit for use ☐

15 At what test level can we begin executing tests in a test environment that resembles the final production environment?

- a) Acceptance testing ☐
- b) Component testing ☐
- c) Integration testing ☐
- d) System testing ☐

16 What is system testing?

- a) Assessing a system's readiness for deployment and use ☐
- b) Determining if interactions between different parts of a system work ☐
- c) Testing the behaviour of a whole system/product ☐
- d) The process of determining if individual units of source code are fit for use ☐

17 Who does acceptance testing?

- a) Typically an independent test organization ☐
- b) Typically developers of the system ☐
- c) Typically customers or users of the system ☐
- d) Typically testers of the system ☐

18 What is the purpose of acceptance testing?

- a) To determine if individual units of source code are fit for use ☐
- b) To determine if interactions between systems work ☐
- c) To establish confidence in the system, and assess its readiness for deployment and use ☐
- d) To test the behaviour of a whole system/product ☐

19 What is operational acceptance testing?

- a) The acceptance of the system by beta testers ☐
- b) The acceptance of the system by business users ☐
- c) The acceptance of the system by independent testers ☐
- d) The acceptance of the system by system administrators ☐

20 Testing executed against a contract's acceptance criteria is called...

- a) Alpha testing ☐
- b) Beta testing ☐
- c) Contract acceptance testing ☐
- d) Regulation acceptance testing ☐

2.3 TEST TYPES

21 What is functional testing?

- a) Functional tests are based on functions and features and their interoperability with specific systems. ☐
- b) Functional tests are based on maintenance work on the software or system. ☐
- c) Functional tests are done after modification, but not migration or retirement of the software or system. ☐
- d) Functional tests are done after modification or migration, but not retirement of the software or system. ☐

22 What is non-functional testing?

- a) Determining if interactions between different parts of a system work ☐
- b) Testing of specific functions, i.e. what the system does ☐
- c) Testing of system characteristics, such as performance ☐
- d) Testing the behaviour of a whole system/product ☐

23 Which of the following is an example of non-functional testing?

- a) Component testing ☐
- b) Data-driven testing ☐
- c) Usability testing ☐
- d) White-box testing ☐

24 Which of the following is an example of non-functional testing?

- a) Configuration testing ☐
- b) Confirmation testing ☐
- c) Maintainability testing ☐
- d) White-box testing ☐

25 Which of the following is an example of non-functional testing?

- a) Confirmation testing ☐
- b) Portability testing ☐
- c) System testing ☐
- d) White-box testing ☐

26 What is structural testing?

- a) Testing that targets defects at runtime, such as memory leaks ☐
- b) Testing that targets individual software components ☐
- c) Testing that targets software architecture ☐
- d) Testing that targets software characteristics, i.e. how the system works ☐

27 When should we do regression testing?

- a) When a fix has been applied to remove a defect ☐
- b) When code has been changed in a previously tested component ☐
- c) When the product is ported to a new platform, such as another operating system ☐
- d) When the product documentation has been updated ☐

28 When is it appropriate to do confirmation testing?

- a) When a fix has been applied to remove a defect ☐
- b) When code has been changed in any way ☐
- c) When the product documentation has been updated ☐
- d) When the system is retired from active use ☐

2.4 MAINTENANCE TESTING

29 When is maintenance testing done?

- a) After any kind of maintenance work on the software or system ☐
- b) After modification, but not migration or retirement of the software or system ☐
- c) After modification or migration, but not retirement of the software or system ☐
- d) After modification, migration or retirement of the software or system ☐

30 Which of the following describes a case of migration of a system?

- a) Moving from a single-core processor type to a multi-core processor type ☐
- b) Moving the software from one platform to another ☐
- c) Moving the source code from one programming language to another ☐
- d) Moving servers from one location to another ☐

31 What is impact analysis?

- a) Determining how much testing to do and when ☐
- b) Determining how the existing system may be affected by changes ☐
- c) Determining how the project may be affected by changes to requirements ☐
- d) Determining the impact of a defect on the users of a system ☐

32 Which of the following statements is true about maintenance testing?

- a) It involves component testing. ☐
- b) It involves no regression or component testing. ☐
- c) It involves regression testing. ☐
- d) It involves static analysis by tools. ☐

ANSWER KEYS – CHAPTER 2

Q	Key	Q	Key
1	a)	17	c)
2	a)	18	c)
3	c)	19	d)
4	b)	20	c)
5	c)	21	a)
6	a)	22	c)
7	b)	23	c)
8	c)	24	c)
9	c)	25	b)
10	a)	26	c)
11	b)	27	b)
12	d)	28	a)
13	a)	29	d)
14	b)	30	b)
15	d)	31	b)
16	c)	32	c)

KNOWLEDGE CHECK – CHAPTER 3

3.1 STATIC TECHNIQUES AND THE TEST PROCESS

1 What are the basic methods of static testing?

- a) Black-box testing and regression testing ☐
- b) Planning and control activities ☐
- c) Requirements management and configuration management ☐
- d) Reviews and static analysis ☐

2 What is the purpose of reviews?

- a) To determine if interactions between systems work ☐
- b) To establish confidence in the system, and assess its readiness for deployment and use ☐
- c) To examine and evaluate work products to prevent defects ☐
- d) To test the behaviour of a whole system or product ☐

3 Static analysis can check the sequence of events (paths) that would occur during code execution. What is the name for this?

- a) Control flow ☐
- b) Control testing ☐
- c) Data flow ☐
- d) Dynamic testing ☐

4 Static analysis can check the state of variables and objects in different states. What is the name for this?

- a) Control flow ☐
- b) Control testing ☐
- c) Data flow ☐
- d) Dynamic testing ☐

5 What is dynamic testing?

- a) To determine if interactions between systems work ☐
- b) To examine and evaluate work products to prevent defects ☐
- c) To study the overall structure of the software or system ☐
- d) To study the software during execution and try to see how it performs ☐

6 What are the common objectives of reviews, static analysis and dynamic testing?

- a) Controlling costs ☐
- b) Identifying defects ☐
- c) Monitoring progress ☐
- d) Reporting incidents ☐

7 Compared to dynamic testing – what is static testing generally better at?

- a) Finding broken dependencies ☐
- b) Finding failures ☐
- c) Finding memory leaks ☐
- d) Finding the causes of failures ☐

8 What is true about reviews?

- a) Reviews can find memory leaks which are unlikely to be found in dynamic testing ☐
- b) Reviews can find non-functional characteristics, e.g. usability, unlikely to be found in dynamic testing ☐
- c) Reviews can find omissions, for instance in requirements, unlikely to be found in dynamic testing ☐
- d) Reviews can find the causes of failures, which are unlikely to be found in dynamic testing ☐

9 Which of the following typical defects is easier to find in reviews than dynamic testing?

- a) Corrupted data ☐
- b) Deviations from standard ☐
- c) Unexpected behaviour ☐
- d) Unusable user interface ☐

3.2 REVIEW PROCESS

10 What benefits can reviews provide for an organization?

- a) Finding defects and gaining understanding ☐
- b) Having defects in the source code fixed and repaired ☐
- c) Improving the skills of individual testers ☐
- d) Performing a review of the testing organization ☐

11 What is the order of the formal review process?

- a) Planning -> individual preparation -> kick-off -> review meeting -> rework -> follow-up ☐
- b) Planning -> individual preparation -> review meeting -> kick-off -> rework -> follow-up ☐
- c) Planning -> kick-off -> individual preparation -> review meeting -> follow-up -> rework ☐
- d) Planning -> kick-off -> individual preparation -> review meeting -> rework -> follow-up ☐

12 Who has the final say on how inspections are executed?

- a) The Manager ☐
- b) The Moderator ☐
- c) The Reviewer ☐
- d) The Scribe ☐

13 Can the moderator and author be the same person?

- a) No, because moderator is a more formal role than author ☐
- b) Yes, at an inspection ☐
- c) Yes, at a walkthrough ☐
- d) Yes, at a technical review ☐

14 What is the name of the most formal type of review? It requires preparation, is led by a trained moderator, and aims to find defects.

- a) Informal review ☐
- b) Inspection ☐
- c) Technical review ☐
- d) Walkthrough ☐

15 What is a technical review?

- a) Technical reviews are led by a moderator and aim to discuss, evaluate options and solve problems. ☐
- b) Technical reviews are led by a moderator and aim to gain understanding of the documents. ☐
- c) Technical reviews are led by the author and aim to discuss, evaluate options and solve problems. ☐
- d) Technical reviews are led by the author and aim to gain understanding of the documents. ☐

16 What is a walkthrough?

- a) Walkthroughs are led by the author and aim to discuss, evaluate options and solve problems. ☐
- b) Walkthroughs are led by the author and aim to gain understanding of the documents. ☐
- c) Walkthroughs are led by a moderator and aims to discuss, evaluate options and solve problems. ☐
- d) Walkthroughs are led by a moderator and aims to gain understanding of the documents. ☐

17 What is the least formal type of review called?

- a) Informal review ☐
- b) Inspection ☐
- c) Technical review ☐
- d) Walkthrough ☐

3.3 STATIC ANALYSIS BY TOOLS

18 What are static analysis tools?

- a) Software applications that can analyze a program while it executes ☐
- b) Software applications that can analyze the performance of a program ☐
- c) Software applications that can analyze program code ☐
- d) Software applications that can analyze the interaction between systems ☐

19 What is the objective of static analysis?

- a) To assess the readiness of the system for deployment ☐
- b) To find defects in software source code and models ☐
- c) To gain information about system characteristics ☐
- d) To trigger as many failures as possible and fix the defects which cause them ☐

20 How is static analysis performed?

- a) By doing exploratory testing after a fix has been applied to the system ☐
- b) While actually executing the software which is being examined ☐
- c) While moving the software between platforms or operating systems ☐
- d) Without actually executing the software which is being examined ☐

21 What kind of tool can typically find the following defects: Referencing a variable with an undefined value, variables that are never used, and unreachable (dead) code?

- a) Debugger ☐
- b) Modelling tool ☐
- c) Static analysis tool ☐
- d) Test harness ☐

22 What is a typical benefit of static analysis?

- a) It enables early detection of defects prior to test execution. ☐
- b) It enables exhaustive testing of defects. ☐
- c) It enables impact analysis and maintenance testing. ☐
- d) It performs functional testing prior to non-functional testing. ☐

23 What is true about static and dynamic testing?

- a) In both static and dynamic testing, the software is executed. ☐
- b) In dynamic testing, the software is executed. In static testing, it is not. ☐
- c) In neither static nor dynamic testing, the software is executed. ☐
- d) In static testing, the software is executed. In dynamic testing, it is not. ☐

24 What is true about reviews and static analysis?

- a) Both reviews and static analysis find defects rather than failures. ☐
- b) Both reviews and static analysis find failures rather than defects. ☐
- c) Reviews find defects rather than failures. Static analysis finds failures rather than defects. ☐
- d) Static analysis finds defects rather than failures. Reviews find failures rather than defects. ☐

ANSWER KEYS – CHAPTER 3

Q	Key	Q	Key
1	d)	13	c)
2	c)	14	b)
3	a)	15	a)
4	c)	16	b)
5	d)	17	a)
6	b)	18	c)
7	d)	19	b)
8	c)	20	d)
9	b)	21	c)
10	a)	22	a)
11	d)	23	b)
12	a)	24	a)

KNOWLEDGE CHECK – CHAPTER 4

4.1 THE TEST DEVELOPMENT PROCESS

1 Which one of the following is NOT part of the test development process?

- a) Analyze requirements to create test design specifications for the test object ☐
- b) Create test design specifications ☐
- c) Handover of testware to maintenance ☐
- d) Specify which results are expected from a test ☐

2 Which one of the following is NOT part of the test development process?

- a) Check exit criteria ☐
- b) Create test procedure specification ☐
- c) Create test execution schedule ☐
- d) Specify which results are expected from a test ☐

3 What is a test design specification?

- a) Documentation of the design of interfaces to be tested ☐
- b) Documentation of the estimated time and resources allocated to testing ☐
- c) Documentation of the number of defects found and fixed ☐
- d) Documentation of the test conditions for a test object ☐

4 The concept of measuring, for instance, the number of test conditions tested (compared to all test conditions identified) is called...

- a) Test case ☐
- b) Test condition ☐
- c) Test coverage ☐
- d) Test specification ☐

5 What type of document contains a set of input values, execution preconditions, expected results, and execution postconditions?

- a) A maintenance testing schedule ☐
- b) A test case specification ☐
- c) A test design specification ☐
- d) A test execution schedule ☐

6 In what document are test cases and test data specified?

- a) The test case specification ☐
- b) The test design specification ☐
- c) The test execution schedule ☐
- d) The test incident report ☐

7 What is specified in the test execution schedule?

- a) The number of tests to be executed during the current test level ☐
- b) The order in which the various test procedures are to be executed ☐
- c) The requirements used for creating test design specifications for a test object ☐
- d) The test conditions for a test object ☐

4.2 CATEGORIES OF TEST DESIGN TECHNIQUES

8 What is true about black-box techniques?

- a) Black-box techniques include only specification-based techniques. ☐
- b) Black-box techniques include only structure-based techniques. ☐
- c) Black-box techniques include specification-based and experience-based techniques. ☐
- d) Black-box techniques include structure-based and specification-based techniques. ☐

9 How would we describe a test that is designed so that it can be re-done in exactly the same way?

- a) Maintainable ☐
- b) Repeatable ☐
- c) Testable ☐
- d) Traceable ☐

10 If requirements or source code changes, a property of test design lets us locate and alter the corresponding tests. What is this property?

- a) Confirmability ☐
- b) Maintainability ☐
- c) Repeatability ☐
- d) Traceability ☐

11 Traceability is vital to what?

- a) Black-box testing ☐
- b) Dynamic testing ☐
- c) Impact analysis ☐
- d) Resource and time estimation ☐

4.3 SPECIFICATION-BASED OR BLACK-BOX TECHNIQUES

12 Which technique can be used to reduce the number of input values to test?

- a) Boundary value analysis ☐
- b) Decision table testing ☐
- c) Equivalence partitioning ☐
- d) Use case testing ☐

13 Which technique can be used to find values at the edges of equivalence partitions?

- a) Boundary value analysis ☐
- b) Decision table testing ☐
- c) Equivalence partitioning ☐
- d) State transition testing ☐

14 Which technique can be used to ensure that all combinations of input values are covered?

- a) Decision table testing ☐
- b) Equivalence partitioning ☐
- c) State transition testing ☐
- d) Use case testing ☐

15 Which technique takes system history (its state) into account when defining input and output values in test cases?

- a) Boundary value analysis ☐
- b) Decision table testing ☐
- c) Equivalence partitioning ☐
- d) State transition testing ☐

16 Which technique can be used to test real-world scenarios of how a system is used?

- a) Boundary value analysis ☐
- b) Decision table testing ☐
- c) Equivalence partitioning ☐
- d) Use case testing ☐

4.4 STRUCTURE-BASED OR WHITE-BOX TECHNIQUES

17 What is true about structure-based techniques?

- a) They assume that the tester has access to project requirements. ☐
- b) They assume that the tester has access to the system's source code. ☐
- c) They assume that the tester has no access to the author of the source code. ☐
- d) They assume that the tester has no access to the system's source code. ☐

18 What is statement coverage?

- a) The percentage of data flow statements that have been exercised by a test case suite ☐
- b) The percentage of decision outcomes that have been exercised by a test case suite ☐
- c) The percentage of executable statements that have been exercised by a test case suite ☐
- d) The percentage of iterative control flow statements that have been exercised by a test case suite ☐

19 What is decision coverage?

- a) The percentage of data flow statements that have been exercised by a test case suite ☐
- b) The percentage of decision outcomes that have been exercised by a test case suite ☐
- c) The percentage of executable statements that have been exercised by a test case suite ☐
- d) The percentage of iterative control flow statements that have been exercised by a test case suite ☐

4.5 EXPERIENCE-BASED TECHNIQUES

20 What is error guessing?

- a) Testers anticipate defects based on experience. ☐
- b) Testers focus on errors rather than failures or defects. ☐
- c) Testers guess what tests to apply. ☐
- d) Testers use statistical likelihood of failures to anticipate them. ☐

21 Making a list of possible errors and designing tests that specifically target those errors is called...

- a) Black-box testing ☐
- b) Bug attack ☐
- c) Error guessing ☐
- d) Fault attack ☐

22 What is true about exploratory testing?

- a) It is typically used to achieve high statement coverage. ☐
- b) It requires information about system internals. ☐
- c) No test cases are written before the testing starts. ☐
- d) Testers always run test cases based on anticipation of defects. ☐

4.6 CHOOSING TEST TECHNIQUES

23 Which of the following aspects are most important to consider when choosing a test technique?

- a) The kind of defects you are likely to encounter and the severity of the possible failures ☐
- b) The number of testers in the team and the tools at their disposal ☐
- c) The test objectives and the types of risk the product faces ☐
- d) The type of testware and the type of development lifecycle ☐

24 Which of the following aspects are most important to consider when choosing a test technique?

- a) The contractual and customer requirements and what regulations you are bound by ☐
- b) The kind of defects you are likely to encounter and the severity of the possible failures ☐
- c) The number of testers in the team and the tools at their disposal ☐
- d) The type of testware and the type of development lifecycle ☐

ANSWER KEYS – CHAPTER 4

Q	Key	Q	Key
1	c)	13	a)
2	a)	14	a)
3	d)	15	d)
4	c)	16	d)
5	b)	17	b)
6	a)	18	c)
7	b)	19	b)
8	c)	20	a)
9	b)	21	d)
10	d)	22	c)
11	c)	23	c)
12	c)	24	a)

TEST DESIGN TECHNIQUES – EXERCISES

SPECIFICATION-BASED TEST TECHNIQUES

EQUIVALENCE PARTITIONING

EXERCISE 1

An input field in a system requires an integer from 1 to 10. What are the equivalence partitions?

Parameter	Equivalence partition	Type (valid/invalid)	Input value
Input field			

EXERCISE 2

A user name shall be 4 to 10 characters long. Which are the equivalence partitions?

Parameter	Equivalence partition	Type (valid/invalid)	Input value
User name			

EXERCISE 3

In a registration web form for job applications, the user shall give information about driver's license. The user shall put yes or no in a drop down list. Which are the equivalence partitions?

Parameter	Equivalence partition	Input value
Driver's license		

EXERCISE 4

For persons 18 to 55 years old, loans for amounts from 10000 to 50000 SEK can be accepted. The interest rate is 5 or 6 percent depending on the risk level of the client. Which are the equivalence partitions? How do you combine the three parameters (age, amount, interest rate)? Create test cases, state if the inputs are valid or invalid. What is your priority of the test cases?

Parameter	Equivalence partition	Type (valid/invalid)	Input value
Age			
Amount			
Interest rate			

Test case	Age	Amount	Interest rate	Type	Priority
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

BOUNDARY VALUE ANALYSIS

EXERCISE 1

Entrance fee is 10 SEK children up to 7 years. For young people up to 20 years the entrance fee is 20 SEK. For other guests the entrance fee is 25 SEK. Define equivalence partitions and boundary values.

Parameter	Equivalence partitions	Boundary values
Age		

EXERCISE 2

During a course enrolment procedure, the candidates fill in their name (3-12 characters) and their social security number (10 digits). Which are the valid equivalence classes for name and social security number? Suggest test cases where both parameters are represented.

Parameter	Valid equivalence partitions	Boundary values
Name		
Social security number		

Selected values	
Name	
Social security number	

Test case	Social security number	Name	Type (valid/invalid)
1			
2			
3			
4			
5			
6			
7			
8			

DECISION TABLES

EXERCISE 1

A function shall be tested, login to a system with user name and password as credentials. Create test cases for combinations of valid and invalid credentials.

Condition	1	2	3	4
Valid user name				
Valid password				
Action				
User logged in				
Error message				

EXERCISE 2

An e-commerce web site offers a 5% discount to registered members. To receive the discount, the member must log in during the checkout process.

The web site also runs a time-limited campaign in which customers will receive 20% off each purchase of \$150 or more. To receive the discount, the customer must enter the correct coupon code at the checkout.

Customers who use the campaign offer will not receive the member discount.

Create test cases for discount calculation using a decision table. Try to reduce the number of test cases as much as possible.

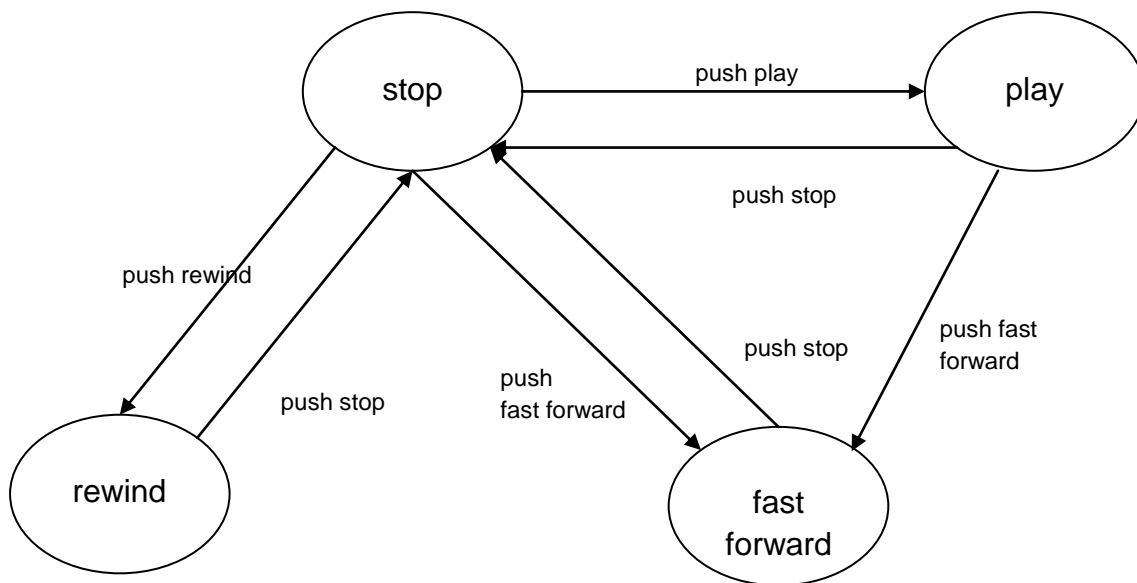
Condition	1	2	3	4	5	6	7	8
Registered member?								
Campaign offer?								
Amount >= \$150?								
Action								
Discount in %								

STATE TRANSITION TESTING

Specify test cases for the state transition diagram below for a media player. Cover the following:

- All states
- All valid transitions

In case of invalid transitions, the media player will go to stop state.



SOLUTION 1

	Current state			
Actions	stop	play	rewind	fast forward
push play				
push stop				
push rewind				
push fast forward				

SOLUTION 2

		Future state			
Actions		stop	play	rewind	fast forward
Current state	stop				
	play				
	rewind				
	fast forward				

STRUCTURE-BASED TEST TECHNIQUES

Review the following pseudo code.

```
1:      if (a==2) then
2:          if (b== 3) then
3:              x = x + 3;
4:      else
5:          x = x / 2;
6:      p = a / r;
7:      if (b / c > 3)
8:          z = x + y;
```

- a) Draw a control flow chart with nodes and edges
- b) How many test cases are required to reach 100% statement coverage?
 - a. Suggest suitable input values for variables a, b and c for each test case
- c) How many test cases are required to reach 100% decision coverage?
 - a. Suggest suitable input values for variables a, b and c for each test case

SOLUTION

FLOWCHART

STATEMENT COVERAGE

DECISION COVERAGE

TEST DESIGN TECHNIQUES – EXERCISES

SPECIFICATION-BASED TEST TECHNIQUES

EQUIVALENCE PARTITIONING

EXERCISE 1

An input field in a system requires an integer from 1 to 10. What are the equivalence partitions?

Parameter	Equivalence partition	Type (valid/invalid)	Input value
Input field	EP 1: $1 \leq \text{integer} \leq 10$	Valid	5
	EP 2: $\text{integer} < 1$	Invalid	-5
	EP 3: $\text{integer} > 10$	Invalid	15
	EP 4: non-integer	Invalid	abc, 3.14

EXERCISE 2

A user name shall be 4 to 10 characters long. Which are the equivalence partitions?

Parameter	Equivalence partition	Type (valid/invalid)	Input value
User name	EP 1: $4 \leq \text{characters} \leq 10$	Valid	qwerty
	EP 2: less than 4 characters	Invalid	abc
	EP 3: more than 10 characters	Invalid	12345678901

EXERCISE 3

In a registration web form for job applications, the user shall give information about driver's license. The user shall put yes or no in a drop down list. Which are the equivalence partitions?

Parameter	Equivalence partition	Input value
Driver's license	EP 1: Yes	Yes
	EP 2: No	No

EXERCISE 4

For persons 18 to 55 years old, loans for amounts from 10000 to 50000 SEK can be accepted. The interest rate is 5 or 6 percent depending on the risk level of the client. Which are the equivalence partitions? How do you combine the three parameters (age, amount, interest rate)? Create test cases, state if the inputs are valid or invalid. What is your priority of the test cases?

Parameter	Equivalence partition	Type (valid/invalid)	Input value
Age	EP 1: $18 \leq \text{age} \leq 55$	Valid	35
	EP 2: $\text{age} < 18$	Invalid	10
	EP 3: $\text{age} > 55$	Invalid	75
	EP 4: non-integer	Invalid	abc
Amount	EP 1: $10000 \leq \text{amount} \leq 50000$	Valid	30000
	EP 2: $\text{amount} < 10000$	Invalid	5000
	EP 3: $\text{amount} > 50000$	Invalid	75000
	EP 4: non-integer	Invalid	abc
Interest rate	EP 1: 5,6	Valid	5
	EP 2: Other amounts	Invalid	10
	EP 3: Non-integer	Invalid	abc

Test case	Age	Amount	Interest rate	Type	Priority
1	35	30000	5	Valid	1
2	10	30000	5	Invalid	2
3	75	30000	5	Invalid	2
4	abc	30000	5	Invalid	2
5	35	5000	5	Invalid	2
6	35	75000	5	Invalid	2
7	35	abc	5	Invalid	2
8	35	30000	10	Invalid	2
9	35	30000	abc	Invalid	2
10	abc	5000	5	Invalid	3
11	abc	30000	abc	Invalid	3
12	35	5000	abc	Invalid	3
13	abc	5000	abc	Invalid	3 (4)

BOUNDARY VALUE ANALYSIS

EXERCISE 1

Entrance fee is 10 SEK children up to 7 years. For young people up to 20 years the entrance fee is 20 SEK. For other guests the entrance fee is 25 SEK. Define equivalence partitions and boundary values.

Parameter	Equivalence partitions	Boundary values
Age	EP 1: age ≤ 7	(-1), 0, 1, 7, 8
	EP 2: $8 \leq \text{age} \leq 20$	7, 8, 20, 21
	EP 3: age > 20	20, 21

EXERCISE 2

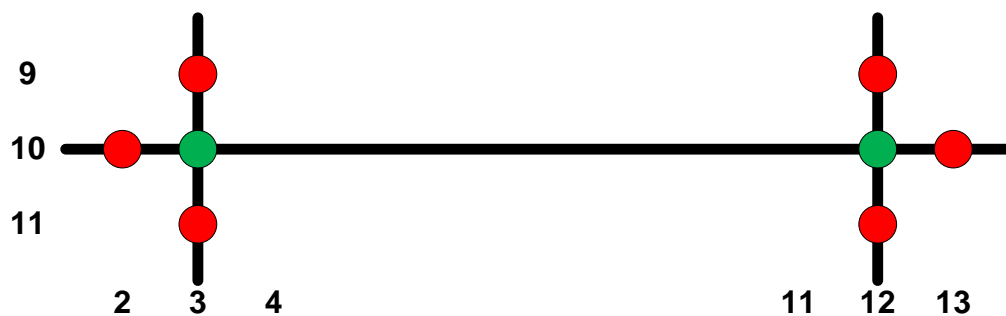
During a course enrolment procedure, the candidates fill in their name (3-12 characters) and their social security number (10 digits). Which are the valid equivalence classes for name and social security number? Suggest test cases where both parameters are represented.

Parameter	Valid equivalence partitions	Boundary values
Name	3-12 characters	2, 3, 4, 11, 12, 13
Social security number	10 digits	9, 10, 11

Selected values	
Name	2, 3, 12, 13
Social security number	9, 10, 11

Test case	Social security number	Name	Type (valid/invalid)
1	10	3	Valid
2	10	12	Valid
3	10	2	Invalid
4	10	13	Invalid
5	11	3	Invalid
6	11	12	Invalid
7	9	3	Invalid
8	9	12	Invalid

Graphical overview of the two parameters using the boundary value analysis technique:



DECISION TABLES

EXERCISE 1

A function shall be tested, login to a system with user name and password as credentials. Create test cases for combinations of valid and invalid credentials.

Condition	1	2	3	4
Valid user name	T	T	F	F
Valid password	T	F	T	F
Action				
User logged in	T	F	F	F
Error message	F	T	T	T

EXERCISE 2

An e-commerce web site offers a 5% discount to registered members. To receive the discount, the member must log in during the checkout process.

The web site also runs a time-limited campaign in which customers will receive 20% off each purchase of \$150 or more. To receive the discount, the customer must enter the correct coupon code at the checkout.

Customers who use the campaign offer will not receive the member discount.

Create test cases for discount calculation using a decision table. Try to reduce the number of test cases as much as possible.

Condition	1	2	3	4	5	6	7	8
Registered member?	T	T	T	T	F	F	F	F
Campaign offer?	T	T	F	F	T	T	F	F
Amount >= \$150?	T	F	T	F	T	F	T	F
Action								
Discount in %	20	5	5	5	20	0	0	0

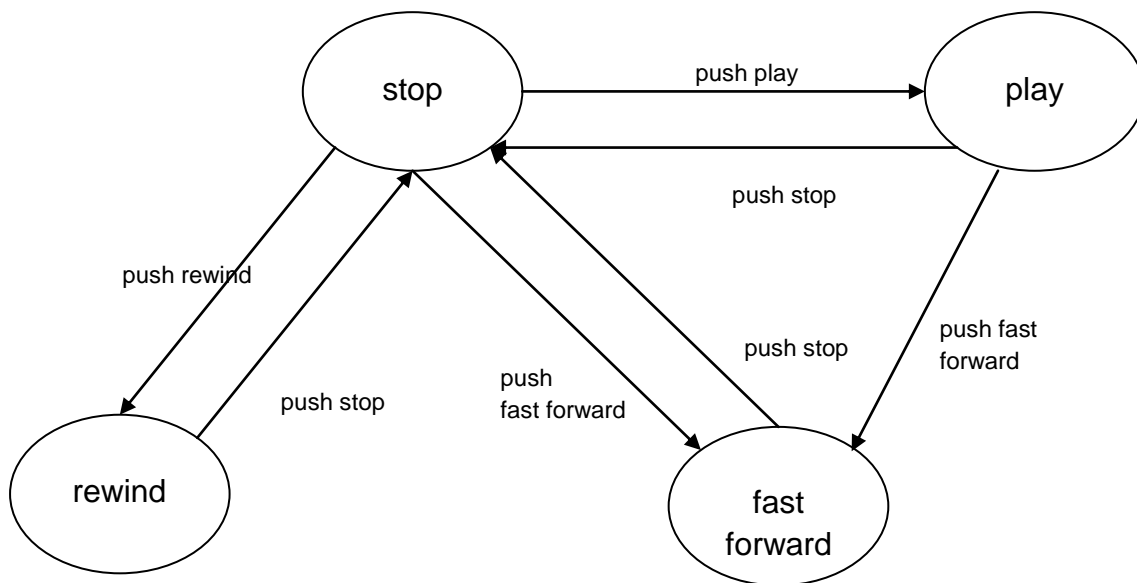
Condition	1	2	3	4	5
Registered member?	*	T	T	F	F
Campaign offer?	T	T	F	T	F
Amount >= \$150?	T	F	*	F	*
Action					
Discount in %	20	5	5	0	0

STATE TRANSITION TESTING

Specify test cases for the state transition diagram below for a media player. Cover the following:

- All states
- All valid transitions

In case of invalid transitions, the media player will go to stop state.



SOLUTION 1

Actions	Current state			
	stop	play	rewind	fast forward
push play	play	stop	stop	stop
push stop	stop	stop	stop	stop
push rewind	rewind	stop	stop	stop
push fast forward	fast forward	fast forward	stop	stop

SOLUTION 2

		Future state				
		Actions	stop	play	rewind	fast forward
Current state	stop	undefined / media player stop	push play / music plays	push rewind / media player rewind	push fast forward / media player fast forward	
	play	push stop / media played stop	undefined / media player stop	undefined / media player stop	push fast forward / media player fast forward	
	rewind	push stop / media played stop	undefined / media player stop	undefined / media player stop	undefined / media player stop	
	fast forward	push stop / media played stop	undefined / media player stop	undefined / media player stop	undefined / media player stop	

STRUCTURE-BASED TEST TECHNIQUES

Review the following pseudo code.

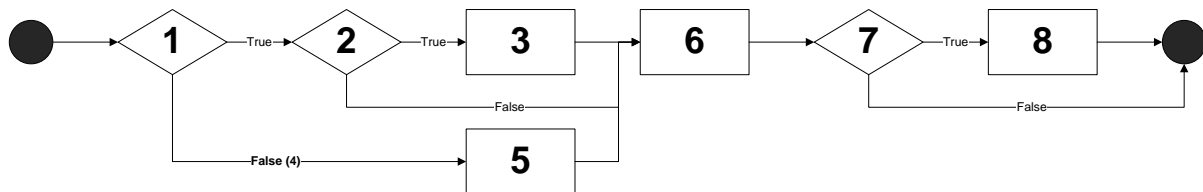
```

1:      if (a==2) then
2:          if (b== 3) then
3:              x = x + 3;
4:      else
5:          x = x / 2;
6:      p = a / r;
7:      if (b / c > 3)
8:          z = x + y;
  
```

- Draw a control flow chart with nodes and edges
- How many test cases are required to reach 100% statement coverage?
 - Suggest suitable input values for variables a, b and c for each test case
- How many test cases are required to reach 100% decision coverage?
 - Suggest suitable input values for variables a, b and c for each test case

SOLUTION

FLOWCHART



STATEMENT COVERAGE

- 2 test cases are required to execute all nodes
 - a = 2, b = 3, c = 1
 - a = 1, b = 4, c = 1

DECISION COVERAGE

- 3 test cases are required to execute all nodes and edges
 - a = 2, b = 3, c = 1
 - a = 1, b = 4, c = 1
 - a = 2, b = 4, c = 1

KNOWLEDGE CHECK – CHAPTER 5

5.1 TEST ORGANIZATION

1 What are the advantages of independence for a testing organization?

- a) Independent testers are used to communicating with developers. ☐
- b) Independent testers find more defects and are more efficient. ☐
- c) Independent testers have experience from other projects in other fields. ☐
- d) Independent testers may find different defects because they are not biased. ☐

2 What is true about independence?

- a) An independent tester avoids many common problems, such as the absence-of-errors-fallacy. ☐
- b) An independent tester can fix bugs and begin testing as soon as documentation is available for a test level. ☐
- c) An independent tester can validate the requirements better than a member of the development team. ☐
- d) An independent tester can verify assumptions people made during specification and building of the system. ☐

3 What are the typical responsibilities of a test leader?

- a) Carrying out analysis, test design, implementation and reviews ☐
- b) Planning, monitoring and controlling testing activities ☐
- c) Testing and evaluating the test design specification ☐
- d) Verifying that test cases are based on requirements ☐

4 What are the typical responsibilities of a tester?

- a) Deciding who should carry out individual tests ☐
- b) Executing tests, carrying out analysis, test design, implementation and reviews ☐
- c) Planning and controlling the documentation of reviews and tests ☐
- d) Testing, evaluating a test object and coordinating test strategy ☐

5.2 TEST PLANNING AND ESTIMATION

5 What is true about test planning?

- a) It's a continuous activity which is done at all test levels and in all lifecycles. ☐
- b) It's a continuous activity which is done at some test levels and in some lifecycles. ☐
- c) It's an intermittent activity which is done at all test levels and in all lifecycles. ☐
- d) It's an intermittent activity which is done at some test levels and in some lifecycles. ☐

6 What are exit criteria?

- a) Exit criteria define when a defect can be removed from the incident report. ☐
- b) Exit criteria define when to stop executing the software. ☐
- c) Exit criteria define when to stop testing. ☐
- d) Exit criteria define when to stop the test design activity. ☐

7 Estimating the testing effort based on former or similar projects is called...

- a) Expert-based approach ☐
- b) Formal approach ☐
- c) Fundamental approach ☐
- d) Metrics-based approach ☐

8 Estimating the testing effort by asking someone well familiar with the test object for advice is called...

- a) Expert-based approach ☐
- b) Formal approach ☐
- c) Fundamental approach ☐
- d) Metrics-based approach ☐

9 What is the risk-based approach to testing?

- a) A reactive, exploratory testing strategy ☐
- b) A testing strategy based on data structure and relationships ☐
- c) A testing strategy based on regulation ☐
- d) A testing strategy based on risk analysis ☐

10 What is the dynamic approach to testing?

- a) A reactive, exploratory testing strategy ☐
- b) A testing strategy based on data structure and relationships ☐
- c) A testing strategy based on regulation ☐
- d) A testing strategy based on risk analysis ☐

11 What is the model-based approach to testing?

- a) A reactive, exploratory testing strategy ☐
- b) A testing strategy based on data structure and relationships ☐
- c) A testing strategy based on regulation ☐
- d) A testing strategy based on risk analysis ☐

12 What is the standard-based approach to testing?

- a) A reactive, exploratory testing strategy ☐
- b) A testing strategy based on data structure and relationships ☐
- c) A testing strategy based on regulation ☐
- d) A testing strategy based on risk analysis ☐

5.3 TEST PROGRESS MONITORING AND CONTROL

13 Which of the following are common test metrics?

- a) Independence of the testing organization ☐
- b) Requirements coverage and number of defects found ☐
- c) Test cases and test conditions ☐
- d) The number of guiding or corrective actions ☐

14 Which of the following are common test metrics?

- a) Coverage of code, risks or requirements ☐
- b) Early testing ☐
- c) Size of code base ☐
- d) Version of testware, test tools and test environment ☐

15 What is the purpose of test monitoring?

- a) To determine the correct test activities ☐
- b) To find defects in the source code ☐
- c) To give feedback and visibility about test activities ☐
- d) To identify defects and gain confidence ☐

16 A certain document describes what happened during a period of testing, assesses the defects remaining, the economic benefit of continued testing, outstanding risks, and the level of confidence in the tested software. What's the name of the document?

- a) Master test plan ☐
- b) Test design specification ☐
- c) Test execution schedule ☐
- d) Test summary report ☐

17 What is test control?

- a) Any corrective actions reported in the test summary report ☐
- b) Any guiding or corrective actions taken as a result of information being gathered and reported ☐
- c) Corrective actions taken by testers as a result of project risks being encountered ☐
- d) Corrective actions taken by test leaders as a result of project risks being encountered ☐

5.4 CONFIGURATION MANAGEMENT

18 What test items are most important to manage for configuration?

- a) Development documents, test plans, test cases, expected results, actual results ☐
- b) Development plans, test plans, test designs, actual results, test tools ☐
- c) Test plans, development designs, test designs, actual results ☐
- d) Test plans, test designs, test cases, actual results, test tools ☐

5.5 RISK AND TESTING

19 What is a project risk?

- a) A risk that affects the cost and percentage of work done, and how this is tracked ☐
- b) A risk that can affect the data structure and relationships in the software under test ☐
- c) A risk that may affect project goals, for instance miscommunication between testers ☐
- d) A risk that may be found inside the software itself, such as poor security characteristics ☐

20 What is a product risk?

- a) A risk that affects the cost and percentage of work done, and how this is tracked ☐
- b) A risk that can affect the data structure and relationships in the software under test ☐
- c) A risk that may affect project goals, for instance miscommunication between testers ☐
- d) A risk that may be found inside the software itself, such as poor security characteristics ☐

21 Which of the following is a product risk?

- a) Communication issues ☐
- b) Defects in the software ☐
- c) Personal and training issues ☐
- d) Skill and staff shortages ☐

22 What is the risk-based approach to testing?

- a) An approach that provides proactive opportunities to reduce the levels of product risk ☐
- b) A reactive, exploratory testing strategy ☐
- c) A testing strategy based on data structure and relationships ☐
- d) A testing strategy based on regulation ☐

23 What is the name of the activity of assessing risks, determining what risks to deal with, and implementing actions to deal with those risks?

- a) Project risk analysis ☐
- b) Product risk evaluation ☐
- c) Risk implementation ☐
- d) Risk management ☐

5.6 INCIDENT MANAGEMENT

24 What is an incident report?

- a) A document prepared after acceptance testing of the system by system administrators ☐
- b) A process in which tests are developed first and the code is then developed until tests pass ☐
- c) A report on the completeness and general quality of the testing project ☐
- d) A report that describes discrepancies between expected and actual outputs of the test object ☐

25 What is an incident?

- a) A discrepancy between expected and actual results ☐
- b) A discrepancy between test case and actual implementation ☐
- c) A discrepancy occurring during test planning and design ☐
- d) Any kind of activity during test execution ☐

26 What does managing incidents mean?

- a) All testware is identified and version controlled ☐
- b) Identifying and controlling versions of an incident at discovery ☐
- c) Tracking bugs from discovery to completion ☐
- d) Tracking incidents from discovery to completion ☐

27 When can an incident be raised?

- a) During development or testing ☐
- b) During development, review or testing ☐
- c) During development, review, testing or use of the software product ☐
- d) During review, testing or use of the software product ☐

28 What can be in an incident report?

- a) Date, expected and actual results, identification, status ☐
- b) Date, expected and actual results, identification, status, communication problems ☐
- c) Date, expected and actual results, identification, status, product risks ☐
- d) Date, expected and actual results, identification, status, product risks, project risks ☐

29 **What document aims to provide developers and others with feedback about a specific problem found?**

- a) Incident report ☐
- b) Master test plan ☐
- c) Test design specification ☐
- d) Test summary report ☐

ANSWER KEYS – CHAPTER 5

Q	Key	Q	Key
1	d)	16	d)
2	d)	17	b)
3	b)	18	d)
4	b)	19	c)
5	a)	20	d)
6	c)	21	b)
7	d)	22	a)
8	a)	23	d)
9	d)	24	d)
10	a)	25	a)
11	b)	26	d)
12	c)	27	c)
13	b)	28	a)
14	a)	29	a)
15	c)		

KNOWLEDGE CHECK – CHAPTER 6

6.1 TYPES OF TEST TOOL

1 Which of the following activities can be supported by test tools?

- a) Test management, test design, test execution, estimation of testing efforts, monitoring of risk avoidance ☐
- b) Test management, test design, test execution, monitoring of performance, monitoring of test coverage ☐
- c) Test management, test design, test execution, monitoring of performance, monitoring of communication ☐
- d) Test management, test design, test execution, monitoring of reliability, monitoring of usability ☐

2 What are typical functions of test management tools?

- a) Prioritization of incidents and assignment of status to incidents ☐
- b) To assign status to different versions and builds of software and tests ☐
- c) To find defects and inconsistencies in the data model ☐
- d) Version control, logging of test results, quantitative analysis ☐

3 Why are configuration management tools necessary?

- a) To assign status to different versions and builds of software and tests ☐
- b) To find defects and inconsistencies in the data model ☐
- c) To keep track of different versions and builds of software and tests ☐
- d) To prioritize incidents, track their status and assign actions to them ☐

4 How can incident management tools support testing?

- a) By finding defects and inconsistencies in the data model ☐
- b) By keeping track of different versions and builds of software and tests ☐
- c) By prioritizing incidents, assigning actions to them and tracking their status ☐
- d) Through version control, logging of test results and qualitative analysis ☐

5 What type of tool handles overarching testing tasks such as planning and scheduling?

- a) Configuration management tool ☐
- b) Incident management tool ☐
- c) Requirements management tool ☐
- d) Test management tool ☐

6 What type of tool handles information about reported discrepancies during testing?

- a) Configuration management tool ☐
- b) Incident management tool ☐
- c) Requirements management tool ☐
- d) Test management tool ☐

7 What type of tool stores information about versions and builds?

- a) Configuration management tool ☐
- b) Incident management tool ☐
- c) Requirements management tool ☐
- d) Test management tool ☐

8 What type of tool stores definitions of desired properties and behaviour of software and systems?

- a) Configuration management tool ☐
- b) Incident management tool ☐
- c) Requirements management tool ☐
- d) Test management tool ☐

9 What is true about static analysis tools?

- a) They are used to simulate the environment in which a unit will be run. ☐
- b) They can be used to record tests during execution. ☐
- c) They can determine differences between files, databases or test results. ☐
- d) They can support the enforcement of coding standards and help to understand the code. ☐

10 Who is the typical user of modelling tools?

- a) Developer ☐
- b) Manager ☐
- c) Reviewer ☐
- d) Tester ☐

11 What does a modelling tool do?

- a) It can find defects and inconsistencies in the data model. ☐
- b) It keeps track of different versions and builds of the data model. ☐
- c) It logs test results and performs quantitative analysis on the project model. ☐
- d) It prioritizes incidents, assigning actions to them based on a testing model. ☐

12 What is a capture playback tool?

- a) A tool that determines differences between files, databases or test results ☐
- b) A tool that supports the enforcement of coding standards and helps to understand the code ☐
- c) A tool used to record tests during execution ☐
- d) A tool used to simulate the environment in which a test object will be run ☐

13 What is a test harness?

- a) A tool that determines differences between files, databases or test results ☐
- b) A tool that supports the enforcement of coding standards and helps to understand the code ☐
- c) A tool used to record tests during execution ☐
- d) A tool used to simulate the environment in which a test object will be run ☐

14 What is a test comparator?

- a) A tool that determines differences between files, databases or test results ☐
- b) A tool that supports the enforcement of coding standards and helps to understand the code ☐
- c) A tool used to record tests during execution ☐
- d) A tool used to simulate the environment in which a test object will be run ☐

15 What type of defects can dynamic analysis tools find?

- a) Bad usability and poor performance under stress ☐
- b) Deviation from standards and unused code ☐
- c) Security flaws and non-compliance with regulations ☐
- d) Time dependencies and memory leaks ☐

16 What does a performance testing tool do?

- a) It can record tests during execution. ☐
- b) It determines differences between files, databases or test results. ☐
- c) It reports on a system's non-functional behaviour under a variety of simulated usage conditions. ☐
- d) It supports the enforcement of coding standards and helps to understand the code. ☐

6.2 EFFECTIVE USE OF TOOLS: POTENTIAL BENEFITS AND RISKS

17 What is true about the benefit of tools?

- a) Tools are good at reducing repetitive work. ☐
- b) Tools lead to continuous benefits quickly. ☐
- c) Tools make information harder to access. ☐
- d) Tools require training of all testing staff. ☐

18 What type of scripting approach involves performing the same test with different data?

- a) Data-driven ☐
- b) Keyword-driven ☐
- c) Repeatability-driven ☐
- d) Traceability-driven ☐

19 What type of scripting approach involves using keywords to describe actions to be taken?

- a) Action-driven ☐
- b) Keyword-driven ☐
- c) Scripting-driven ☐
- d) Traceability-driven ☐

20 What is true about scripts captured by capture playback tools?

- a) They can automatically adopt to user interface changes. ☐
- b) They can trigger a lot of error messages. ☐
- c) They make information harder to access. ☐
- d) They may be unstable when unexpected events occur. ☐

21 What is true about test execution tools?

- a) They can trigger a lot of error messages. ☐
- b) They make information harder to access. ☐
- c) They may be unstable when unexpected events occur. ☐
- d) They require significant effort to achieve significant benefits. ☐

22 What is true about static analysis tools?

- a) They can trigger a lot of error messages. ☐
- b) They make information harder to access. ☐
- c) They may be unstable when unexpected events occur. ☐
- d) They require significant effort to achieve significant benefits. ☐

6.3 INTRODUCING A TOOL INTO AN ORGANIZATION

23 Which of the following is a general recommendation for introducing a new tool?

- a) Collecting the opinions of every stakeholder on the tool ☐
- b) Creating test specifications for all current tools ☐
- c) Rolling out the tool as quickly as possible to the whole organization ☐
- d) Rolling out the tool to different parts of the organization incrementally ☐

24 Which of the following is NOT a general recommendation for introducing a new tool?

- a) Adapting and improving processes to fit with the use of the tool ☐
- b) Carrying out a usability and performance study of the tool ☐
- c) Implementing a way to learn lessons from tool use ☐
- d) Providing training and coaching/mentoring for new users ☐

25 What is usually the first step of evaluating a new tool?

- a) A due-diligence study ☐
- b) A functional and non-functional test of the tool ☐
- c) A pilot project ☐
- d) A total cost of use report ☐

26 Which of the following is least important to consider before introducing a new tool?

- a) Assessment of organizational maturity ☐
- b) Capability for automation ☐
- c) Evaluation against requirements and objective criteria ☐
- d) Evaluation of the vendor ☐

ANSWER KEYS – CHAPTER 6

Q	Key	Q	Key
1	b)	14	a)
2	d)	15	d)
3	c)	16	c)
4	c)	17	a)
5	d)	18	a)
6	b)	19	b)
7	a)	20	d)
8	c)	21	d)
9	d)	22	a)
10	a)	23	d)
11	a)	24	b)
12	c)	25	c)
13	d)	26	b)

**Swedish Software Testing Board (SSTB)
International Software Testing Qualifications Board (ISTQB)**

Foundation Certificate in Software Testing

Practice Exam (Syllabus 2011)

Ver 2015, 2015-12-19

Time allowed: 1 hour 15 minutes

**There are 40 questions, each question 1 point
You need 26 points or more to pass**

You have to follow directives given to you by the invigilator during the whole exam

Mark your answers within the marked area in the provided answer sheet. Try to answer all 40 questions. Mark only one answer per question. Erase any answer you decide to change and mark your new chosen answer clearly.

You are not allowed to keep the questionnaire, other documents or notes. All papers must be handed back to the invigilator at the end of the exam.

1.	<p>Which of the following statements <u>BEST</u> describes one of the seven key principles of software testing?</p> <ul style="list-style-type: none"> a) Automated tests avoid exhaustive testing better than manual tests b) The purpose of testing is to demonstrate the absence of defects c) It is normally impossible to test all input / output combinations for a software system d) With sufficient effort and tool support, exhaustive testing is feasible for all software
2.	<p>Which of the following statements is the <u>MOST</u> valid goal for a test team during development?</p> <ul style="list-style-type: none"> a) To determine whether enough component testing was executed within system testing b) To prove that any remaining faults will not cause any failures c) To detect as many failures as possible so that faults can be identified and corrected d) To prove that all faults are identified
3.	<p>Which one of these tasks would you expect to be performed during the Test Analysis and Design phase of the Fundamental Test Process?</p> <ul style="list-style-type: none"> a) Analyzing lessons learned for process improvement b) Reviewing the test basis c) Defining test objectives d) Creating test suites from test procedures
4.	<p>Below is a list of problems that can be observed during testing or in production. Which one of these problems is <u>MOST</u> likely a failure?</p> <ul style="list-style-type: none"> a) The product crashed when the user selected an option in a dialog box b) One source code file included in the build has the wrong version c) The computation algorithm used wrong input variables d) The developer misinterpreted the requirement for the algorithm
5.	<p>Which one of the following attitudes, qualifications or actions would lead to problems (or conflict) within mixed teams of testers and developers, when observed in reviews and tests?</p> <ul style="list-style-type: none"> a) Testers and developers communicate defects as criticism of people, not as criticism of the software product b) Testers expect that there might be defects in the software product which the developers have not found and fixed c) Testers and developers are curious and focused on finding defects d) Testers and developers are sufficiently qualified to find failures and faults

6.	<p>Which of the following statements are TRUE?</p> <p>A. Software testing may be required to meet legal or contractual requirements</p> <p>B. Software testing is mainly needed to improve the quality of the product released by the developers</p> <p>C. Rigorous testing and fixing of found defects could help reduce the risk of problems occurring in an operational environment</p> <p>D. Rigorous testing is sometimes used to prove that all failures have been found</p> <p>a) A, B and C are true; D is false</p> <p>b) A is true; B, C, and D are false</p> <p>c) C and D are true; A and B are false</p> <p>d) A and C are true; B and D are false</p>
7.	<p>Which one of the following statements mostly correctly describes the difference between testing and debugging?</p> <p>a) Dynamic testing prevents causes of failures; debugging removes the failures</p> <p>b) Testing identifies the source of defects; debugging analyzes the faults and proposes prevention activities</p> <p>c) Dynamic testing shows failures caused by defects; debugging finds, analyzes and removes the causes of failures in the software</p> <p>d) Testing removes faults; debugging identifies the causes of failures</p>
8.	<p>Which ONE of the statements below BEST describes non-functional testing?</p> <p>a) Non-functional testing is the process of testing an integrated system to verify that it meets specified requirements</p> <p>b) Non-functional testing is testing without reference to the internal structure of a system</p> <p>c) Non-functional testing is testing system attributes, such as usability, reliability or maintainability</p> <p>d) Non-functional testing is the process of testing to determine system compliance with coding standards</p>
9.	<p>When working with software development models, what is important to do?</p> <p>a) Choose the waterfall model, because it is the most proven model</p> <p>b) Start with the V-model, and then move to either the iterative or the incremental model</p> <p>c) Change the organization to fit the model, not vice versa</p> <p>d) If needed, adapt the models to project and product characteristics</p>

10.	<p>Which ONE of the following characteristics of good testing and applies to any software development life cycle model?</p> <ul style="list-style-type: none"> a) All test levels are planned and completed for each developed feature b) For every development activity there is a corresponding testing activity c) Testers are involved as soon as the first piece of code can be executed d) Acceptance testing is always the final test level to be applied
11.	<p>Which ONE of the following is an example of maintenance testing?</p> <ul style="list-style-type: none"> a) To test corrected defects during development of a new system b) To integrate functions during the development of a new system c) To test enhancements to an existing operational system d) To handle complaints about system quality during user acceptance testing
12.	<p>Which of the following statements are true or false?</p> <ul style="list-style-type: none"> A. Regression testing and re-testing are the same B. Regression tests show if all defects have been resolved C. Regression tests are good candidates for test automation D. Regression tests are performed to uncover defects in working functionalities as a result of changes in the software E. Regression tests should not be performed during integration testing. <ul style="list-style-type: none"> a) A and B are true; C, D and E are false b) C and D are true; A, B and E are false c) B, D and E are true; A, and C are false d) A, C and E are true; B and D are false
13.	<p>Which ONE of the following statements comparing component testing and system testing is TRUE?</p> <ul style="list-style-type: none"> a) 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, functional specifications or use cases b) Component testing only focuses on functional characteristics, whereas system testing focuses on functional and non-functional characteristics c) 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 d) Component testing is the responsibility of the technical testers, whereas system testing typically is the responsibility of the users of the system

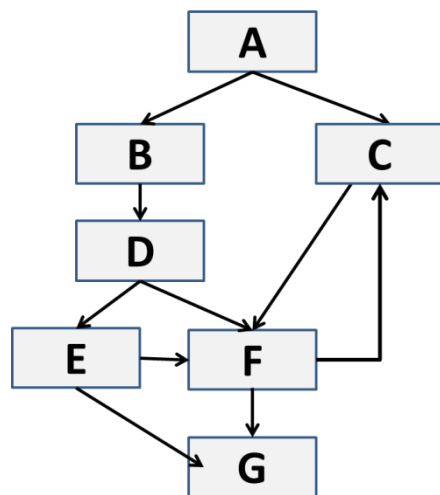
14.	<p>Which ONE of the following describes the main phases of a formal review?</p> <ul style="list-style-type: none">a) Planning, preparation, review meeting, rework, closure, follow upb) Initiation, status, preparation, review meeting, rework, follow upc) Preparation, review meeting, rework, closure, follow up, root cause analysisd) Planning, kick off, individual preparation, review meeting, rework, follow up
15.	<p>Which ONE of the review types below is the BEST option to choose for reviewing safety critical components in a software project?</p> <ul style="list-style-type: none">a) Desk checkingb) Walkthroughc) Informal Reviewd) Inspection
16.	<p>Which ONE of the following statements about tool-supported static analysis is <u>FALSE</u>?</p> <ul style="list-style-type: none">a) Tool-supported static analysis can find defects that are not easily found by dynamic testingb) Tool-supported static analysis is a good way to force failures into the softwarec) Tool-supported static analysis can be used as a preventive measure with appropriate processes in placed) Tool-supported static analysis can result in cost savings by finding defects early

17. One of the test goals for the project is to have 100% decision coverage. The following three tests have been executed for the control flow graph shown below.

Test A covers path: A, B, D, E, G.

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

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



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

- a) Decision E has not been tested completely
- b) Decision F has not been tested completely
- c) Decision D has not been tested completely
- d) Decision coverage of 100% has been achieved

18. A defect was found during testing:

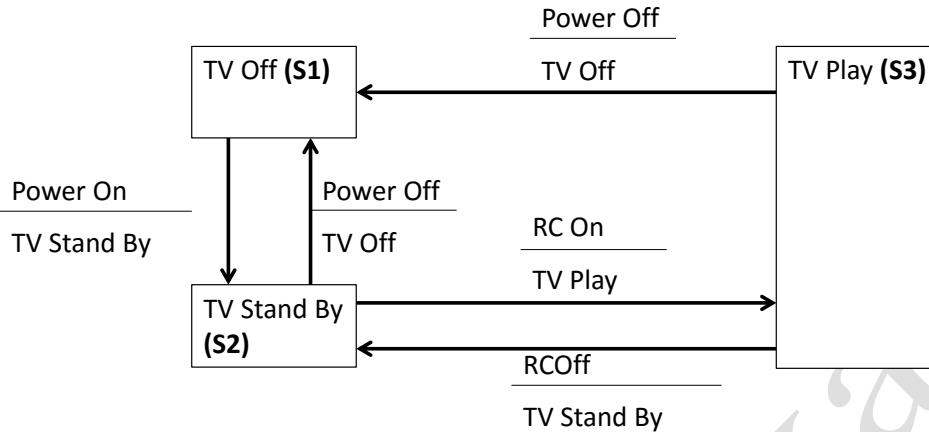
While receiving customer data from a server the system crashed. The defect was fixed by correcting the code that checked the network availability during data transfer. The existing test cases covered 100% of all statements of the corresponding module. To verify the fix and to ensure more extensive coverage, some new tests were designed and added to the test suite and executed.

What types of testing are mentioned above?

- A. Functional testing.
- B. Structural testing.
- C. Re-testing.
- D. Performance testing.

- a) A and B are true. C and D are false
- b) A and C are true. B and D are false
- c) A, B and C are true. D is false
- d) B, C and D are true. A is false

19. Which ONE of the following statements about the given state transition diagram and table of test cases is TRUE?



Test Case	1	2	3	4	5
Start state	S1	S2	S2	S3	S3
Input	Power On	Power Off	RC On	RC Off	Power Off
Expected Output	TV Stand By	TV Off	TV Play	TV Stand By	TV Off
Finish state	S2	S1	S3	S2	S1

- a) The given test cases represent sequential pairs of transitions in the state transition diagram
- b) The given test cases can be used to derive both valid and invalid transitions in the state transition diagram
- c) The given test cases represent only some of the valid transitions in the state transition diagram
- d) The given test cases represent all possible valid transitions in the state transition diagram

20.	<p>Which of the following statements for the equivalence partitioning test technique are <u>TRUE</u>?</p> <p>A. It divides possible inputs into classes where all elements are expected to cause the same behavior</p> <p>B. It uses both valid and invalid partitions.</p> <p>C. It must include at least two values from every equivalence partition</p> <p>D. It can be used only for testing equivalence partitions inputs from a Graphical User Interface</p> <p>a) A, B, D are true; C is false b) A is true; B, C, D are false c) A, B are true; C, D are false d) B, C are true; A, D are false</p>
21.	<p>Which of the following techniques are categorized as Black-box design techniques?</p> <p>a) Equivalence Partitioning testing, Decision Table Testing, Statement Coverage, Use Case Testing</p> <p>b) Equivalence Partitioning Testing, Decision Coverage Testing, Use Case Testing</p> <p>c) Equivalence Partitioning Testing, Decision Coverage Testing, Boundary Value Analysis</p> <p>d) Equivalence Partitioning Testing, Decision Table Testing, State Transition Testing and Boundary Value Analysis</p>
22.	<p>An employee's bonus is to be calculated.</p> <p>It cannot be negative, but it can be calculated down to zero. The bonus is based on the length of employment. The categories are: less than or equal to 2 years, more than 2 years but less than 5 years, 5 to 10 years, or longer than 10 years. Depending on the length of employment, an employee will get different level of bonus.</p> <p>How many equivalence partitions are needed to test the calculation of the bonus?</p> <p>a) 2 b) 5 c) 3 d) 4</p>

23.	<p>Which of the following statements about the benefits of deriving test cases from use cases are true and which are false?</p> <p>A. Deriving test cases from use cases is helpful for system and acceptance testing B. Deriving test cases from use cases is helpful only for automated testing C. Deriving test cases from use cases is helpful for component testing D. Deriving test cases from use cases is helpful for integration testing</p> <p>a) A is true; B, C, D are false b) A, C, D are true; B is false c) A, D are true; B, C are false d) B, D are true; A, C are false</p>
24.	<p>Which <u>ONE</u> of the options below would be the BEST basis for testing using fault attacks?</p> <p>a) Expected results from comparison with an existing system b) Experience, defect and failure data, knowledge about software failures c) Use Cases derived from the business flows by domain experts d) Risk identification performed at the beginning of the project</p>
25.	<p>You are working on a project that has poor specifications and time pressure. Which ONE of the following test techniques would be the best test approach to use?</p> <p>a) Statement Testing b) Exploratory Testing c) Use Case Testing d) Decision Testing</p>
26.	<p>Which one of the following test techniques is a white-box technique?</p> <p>a) Equivalence Partitioning b) Boundary Value Analysis c) State Transition Testing d) Decision Testing</p>

- 27. You have started specification-based software testing.**
The system under test calculates the greatest common divisor (GCD) of two integers (A and B) greater than zero.
- calcGCD (A, B);
- The following test cases (TC) have been specified.
- | TC | A | B |
|----|-------------|-------------|
| 1 | 1 | 1 |
| 2 | INT_MAX | INT_MAX |
| 3 | 1 | 0 |
| 4 | 0 | 1 |
| 5 | INT_MAX + 1 | 1 |
| 6 | 1 | INT_MAX + 1 |
- INT_MAX: largest Integer
- Which test technique has been applied in order to determine test cases 1 through 6?
- a) Use Case Testing
 - b) State Transition Testing
 - c) Decision Table Testing
 - d) Boundary Value Analysis

- 28. A company's employees are paid bonuses if they had worked more than a year in the company and achieved individual agreed targets.**

The following decision table has been designed to test the system:

		T1	T2	T3	T4	T5	T6	T7	T8
Conditions									
Cond1	Employment for more than 1 year?	YES	NO	YES	NO	YES	NO	YES	NO
Cond2	Agreed target?	NO	NO	YES	YES	NO	NO	YES	YES
Cond3	Achieved target?	NO	NO	NO	NO	YES	YES	YES	YES
Action									
	Bonus payment?	NO	NO	NO	NO	NO	NO	YES	NO

Which test cases could be eliminated in the above decision table because the situation would not occur in a real situation?

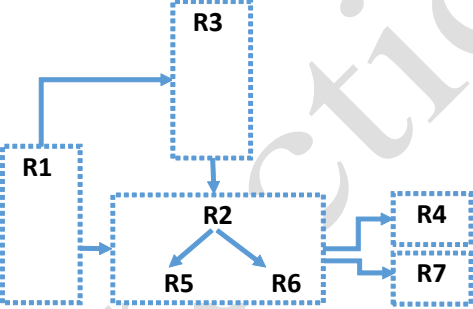
- a) T3 and T4
- b) T5 and T6
- c) T7 and T8
- d) T1 and T2

- 29. Which ONE of the following BEST describes how tasks are divided between the test manager and the tester?**

- a) The test manager plans and organizes the testing and specifies the test cases, while the tester prioritizes and executes the tests
- b) The test manager plans, organizes and controls the testing activities, while the tester specifies and executes tests
- c) The test manager plans, monitors and controls the testing activities, while the tester designs tests and decides about approval of the test object
- d) The test manager plans testing activities and chooses the standards to be followed, while the tester chooses the tools and controls to be used

- 30. Which ONE of the following can be categorized as product risks?**

- a) Low quality of requirements, design, code and tests
- b) Error-prone areas, potential harm to the user and poor product characteristics
- c) Political problems and delays in especially complex areas in the product
- d) Problems in defining the right requirements and potential failure areas in the software or system

31.	<p>Which ONE of the following are typical test exit criteria from testing?</p> <ul style="list-style-type: none"> a) Test coverage measures, reliability measures, degree of tester independence and product completeness b) Test coverage measures, reliability measures, test cost, schedule, state of defect correction and residual risks c) Time to market, residual defects, tester qualification, degree of tester independence, thoroughness measures and test cost d) Test coverage measures, reliability measures, test cost, time to market and product completeness, availability of testable code
32.	<p>As a Test Manager you have the following requirements to test:</p> <p>Requirements to test: R1 - Process Anomalies R2- Synchronization R3- Confirmation R4 - Issues R5 - Financial Data R6 - Diagram Data R9 - Changes to the User Profile</p> <p>The notation to indicate any Requirement's logical dependencies, is, for example, "R1 ->R3", meaning that R3 is dependent on R1.</p>  <pre> graph TD R1[R1] --> R3[R3] R1[R1] --> R2[R2] R3[R3] --> R2[R2] R2[R2] --> R5[R5] R2[R2] --> R6[R6] R5[R5] --> R7[R7] R6[R6] --> R7[R7] R4[R4] --> R7[R7] </pre> <p>Which ONE of the following options structures the test execution schedule according to the requirement dependencies?</p> <ul style="list-style-type: none"> a) R1 > R3 > R2 > R5 > R6 > R4> R7 b) R2 > R5 > R6 > R4 > R7 > R1 > R3 c) R3 > R2 > R1 > R7 > R5 > R6 > R4 d) R1 > R2 > R5 > R6 > R3 > R4 > R7

33.	<p>Which ONE of the following is a possible benefit of independent testing</p> <ul style="list-style-type: none"> a) Independent testers tend to be unbiased and find different defects than the developers b) Independent testers do not need extra education and training c) More work gets done because testers do not disturb the developers all the time d) Independent testers reduce the bottleneck in the incident management process
34.	<p>Which ONE of the following is a project risk?</p> <ul style="list-style-type: none"> a) Failure-prone software delivered b) Poor software characteristics (e.g. usability) c) Skill and staff shortages d) Possible reliability defect (bug)
35.	<p>As a test manager, you are asked for a test summary report. Concerning test activities what should be the <u>MOST</u> important information to include in your report?</p> <ul style="list-style-type: none"> a) Overall evaluation of each development work item b) Training taken by members of the test team to support the test effort c) The number of test cases executed and their results d) An overview of the major testing activities, events and the status with respect to meeting goals
36.	<p>You are a tester in a safety-critical software development project. During execution of a test, you find out that one of your test cases failed, causing you to write an incident report. What should you consider to be the most important information to include in your incident report?</p> <ul style="list-style-type: none"> a) Unique ID for the report, special requirements needed and the person who caused the defect b) Transmitted items, your name and your feelings about the possible root cause of the defect c) Impact, incident description, date and your name d) Incident description, development environment and expected results of testing

37.	<p>From the list below, which are the recommended principles for introducing a test tool in an organization?</p> <ol style="list-style-type: none"> 1. Roll out the tool out to the entire organization at the same time. 2. Start with a pilot project. 3. Adapt and improve processes to fit the use of the tool. 4. Provide training and coaching for new users. 5. Let each team decide their own ways of using the tool. 6. Monitor that costs do not exceed initial acquisition cost. 7. Gather lessons learned from all teams. <p>a) 1, 6, 7 b) 2, 3, 4, 7 c) 1, 3, 4, 5 d) 2, 5, 6</p>
38.	<p>Which one of the following <u>BEST</u> describes a characteristic of a keyword-driven test execution tool?</p> <ol style="list-style-type: none"> a) Actions of testers are automated using a script that is run with several sets of test input data b) A table with test input data, action words, and expected results controls execution of the system under test c) Actions of testers are automated using a script that is rerun several times d) The ability to log test results and compare them against the expected results, stored in a text file
39.	<p>Which of the following is <u>NOT</u> a goal of a pilot project for tool evaluation?</p> <ol style="list-style-type: none"> a) To determine use, management, storage, and maintenance of the tool and testware b) To reduce the defect rate in the pilot project c) To evaluate how the tool fits with existing processes and practices d) To assess whether the benefits will be achieved at reasonable cost
40.	<p>A software development and test organization would like to achieve the test efficiency improvement goals listed below. Which ONE of these goals would best be supported by a test management tool?</p> <ol style="list-style-type: none"> a) Optimize the ability of tests to identify failures b) Enable traceability between requirements, tests, and defects (bugs) c) Automate a selection of test cases for execution d) Resolve defects faster

Please return this questionnaire and all your notes together with your answer sheet at the end of the examination.

Foundation Certificate in Software Testing

Practice Exam ver 2015

2015-12-19

Answer sheet

Make a crossover (X) for your answer per question. Mark only one answer per question. Erase any answer you decide to change and mark your new chosen answer clearly.

1	(a)	(b)	(c)	(d)
2	(a)	(b)	(c)	(d)
3	(a)	(b)	(c)	(d)
4	(a)	(b)	(c)	(d)
5	(a)	(b)	(c)	(d)

21	(a)	(b)	(c)	(d)
22	(a)	(b)	(c)	(d)
23	(a)	(b)	(c)	(d)
24	(a)	(b)	(c)	(d)
25	(a)	(b)	(c)	(d)

6	(a)	(b)	(c)	(d)
7	(a)	(b)	(c)	(d)
8	(a)	(b)	(c)	(d)
9	(a)	(b)	(c)	(d)
10	(a)	(b)	(c)	(d)

26	(a)	(b)	(c)	(d)
27	(a)	(b)	(c)	(d)
28	(a)	(b)	(c)	(d)
29	(a)	(b)	(c)	(d)
30	(a)	(b)	(c)	(d)

11	(a)	(b)	(c)	(d)
12	(a)	(b)	(c)	(d)
13	(a)	(b)	(c)	(d)
14	(a)	(b)	(c)	(d)
15	(a)	(b)	(c)	(d)

31	(a)	(b)	(c)	(d)
32	(a)	(b)	(c)	(d)
33	(a)	(b)	(c)	(d)
34	(a)	(b)	(c)	(d)
35	(a)	(b)	(c)	(d)

16	(a)	(b)	(c)	(d)
17	(a)	(b)	(c)	(d)
18	(a)	(b)	(c)	(d)
19	(a)	(b)	(c)	(d)
20	(a)	(b)	(c)	(d)

36	(a)	(b)	(c)	(d)
37	(a)	(b)	(c)	(d)
38	(a)	(b)	(c)	(d)
39	(a)	(b)	(c)	(d)
40	(a)	(b)	(c)	(d)

Name: _____

Please complete form in BLOCK Capitals.	<i>ISTQB Software Testing</i> Foundation Certificate Candidate Registration Form	
IS ENGLISH YOUR 1ST LANGUAGE YES / NO IF NO, WHAT IS?	Candidate Number (Office use only)	
<i>PLEASE PRINT READABLE.</i> The text below will be used in mailing the certificate.		
First Name	Surname	
Home Address	Work Name and Address	
Home Telephone Number	Work/Daytime Telephone Number	
<i>N.B. All correspondence will be addressed to your home address unless otherwise stated</i>		
Email address:		
<i>Education: Highest qualification achieved and date achieved</i>		
Date	Qualification	
<i>Experience:</i>	Number of years	
As a Software Tester		
As a Software Developer		
Other: (please specify)		
Did you: (Please select only one option)	<input type="checkbox"/> Attend the previous finished ISTQB Foundation course? (Classroom or e-learning) <input type="checkbox"/> Attend an ISTQB Foundation course earlier? <input type="checkbox"/> Only study by yourself?	
Dates of course attended:		
Please PRINT how you would like your name to appear on the certificate		
Candidate's Signature Date		
Please tick here if you do not wish your examination mark to be released to your Training Provider. <input type="checkbox"/>		

Foundation Certificate in Software Testing

Practice Exam ver 2015

2015-12-19

Answer sheet

Make a crossover (X) for your answer per question. Mark only one answer per question. Erase any answer you decide to change and mark your new chosen answer clearly.

1	(a)	(b)	(c)	(d)
2	(a)	(b)	(c)	(d)
3	(a)	(b)	(c)	(d)
4	(a)	(b)	(c)	(d)
5	(a)	(b)	(c)	(d)

21	(a)	(b)	(c)	(d)
22	(a)	(b)	(c)	(d)
23	(a)	(b)	(c)	(d)
24	(a)	(b)	(c)	(d)
25	(a)	(b)	(c)	(d)

6	(a)	(b)	(c)	(d)
7	(a)	(b)	(c)	(d)
8	(a)	(b)	(c)	(d)
9	(a)	(b)	(c)	(d)
10	(a)	(b)	(c)	(d)

26	(a)	(b)	(c)	(d)
27	(a)	(b)	(c)	(d)
28	(a)	(b)	(c)	(d)
29	(a)	(b)	(c)	(d)
30	(a)	(b)	(c)	(d)

11	(a)	(b)	(c)	(d)
12	(a)	(b)	(c)	(d)
13	(a)	(b)	(c)	(d)
14	(a)	(b)	(c)	(d)
15	(a)	(b)	(c)	(d)

31	(a)	(b)	(c)	(d)
32	(a)	(b)	(c)	(d)
33	(a)	(b)	(c)	(d)
34	(a)	(b)	(c)	(d)
35	(a)	(b)	(c)	(d)

16	(a)	(b)	(c)	(d)
17	(a)	(b)	(c)	(d)
18	(a)	(b)	(c)	(d)
19	(a)	(b)	(c)	(d)
20	(a)	(b)	(c)	(d)

36	(a)	(b)	(c)	(d)
37	(a)	(b)	(c)	(d)
38	(a)	(b)	(c)	(d)
39	(a)	(b)	(c)	(d)
40	(a)	(b)	(c)	(d)

Name: _____

Please complete form in BLOCK Capitals.	ISTQB Software Testing Foundation Certificate Candidate Registration Form	
IS ENGLISH YOUR 1 ST LANGUAGE YES / NO IF NO, WHAT IS?	Candidate Number (Office use only)	
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Email address:		
Education: Highest qualification achieved and date achieved		
Date	Qualification	
Experience:	Number of years	
As a Software Tester		
As a Software Developer		
Other: (please specify)		
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Dates of course attended:		
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Candidate's Signature Date		
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Foundation Certificate, Answer keys

SSTB FL Practice Exam ver 2015, 2015-12-19

Q	Key	Chap	K-level
1	c)	1	K1
2	c)	1	K1
3	b)	1	K1
4	a)	1	K2
5	a)	1	K2
6	a)	1	K2
7	c)	1	K2
8	c)	2	K1
9	d)	2	K2
10	b)	2	K1
11	c)	2	K1
12	b)	2	K2
13	a)	2	K2
14	d)	3	K1
15	d)	3	K2
16	b)	3	K1
17	c)	4	K4
18	c)	4	K3
19	d)	4	K3
20	c)	4	K2
21	d)	4	K1
22	d)	4	K3
23	c)	4	K2
24	b)	4	K1
25	b)	4	K1
26	d)	4	K1
27	d)	4	K3
28	b)	4	K3
29	b)	5	K1
30	b)	5	K2
31	b)	5	K2
32	a)	5	K3
33	a)	5	K1
34	c)	5	K1
35	d)	5	K2
36	c)	5	K3
37	b)	6	K1
38	b)	6	K1
39	b)	6	K1
40	b)	6	K2