

CC-307 Software Testing

- **Unit-1,2,3 Covered from Software Testing By Naresh Chauhan**
- **Unit-4 Covered from Software Testing By Srinivasan Desikan**

Unit-1 [Chapter-1, 2]

Chapter-1

1. Bug discovery is a _____ goal of software testing.
(a) Long-term
(b) Short-term
(c) Post-implementation
(d) All
2. Customer satisfaction and risk management are _____ goals of software testing.
(a) Long-term
(b) Short-term
(c) Post-implementation
(d) All
3. Reduced maintenance is a _____ goal of software testing.
(a) Long-term
(b) Short-term
(c) Post-implementation
(d) All
4. Software testing produces _____.
(a) Reliability
(b) Quality
(c) Customer Satisfaction
(d) All
5. Testing is the process of _____ errors.
(a) Hiding
(b) Finding
(c) Removing
(d) None
6. Complete testing is _____.
(a) Possible
(b) Impossible
(c) None

Chapter-2

1. Fault is synonymous with the word _____.
(a) Failure

(b) Defect

(c) Error

(d) All of the above

2. The inability of a system or component to perform a required function according to its specification is called as _____.

(a) Failure

(b) Bug

(c) Error

(d) None of the above

3. Testware includes _____.

(a) test planning document

(b) test data

(c) test specifications

(d) All of the above

4. Symptom(s) associated with a failure that alerts the user to the occurrence of a failure is called _____.

(a) Bug

(b) Error

(c) Defect

(d) Incident

5. Testing process starts as soon as the _____ for the system are prepared.

(a) Design

(b) Coding

(c) Specifications

(d) None of the above

6. Testing strategy should start at the _____ module level and expand towards the whole program.

(a) Smallest

(b) Largest

(c) None of the above

7. Testing is a _____ process.

(a) Intuitive

(b) Random

(c) Planned

(d) None of the above

8. Planning the whole testing process into a well-planned series of steps is called _____.

(a) Test strategy matrix

(b) Test factor

(c) Test phase

(d) Test strategy

9. The test strategy matrix is prepared using the _____.

(a) test planning and execution

(b) test factor and test phase

- (c) test factor
- (d) test phase

10. The process of evaluating a system or component to determine whether the products of a given development phase satisfy the conditions imposed at the start of that phase is called _____.

(a) Verification

- (b) Validation
- (c) SDLC

(d) None of the above Software Testing Terminology and Methodology 63 I

11. The process of evaluating a system or component during or at the end of the development process to determine whether it satisfies the specified requirements is called _____.

(a) Verification

(b) Validation

- (c) SDLC
- (d) None of the above

12. In the early stages of SDLC, testing comprises more _____ activities and towards the later stages, the emphasis is on the _____ activities.

(a) verification, validation

- (b) validation, verification
- (c) integration, coding
- (d) None

13. Technique for assessing the structural characteristics of source code, design specifications, or any notational representation that conforms to well-defined syntactic rules is called _____.

(a) Dynamic testing

(b) Static Testing

- (c) Black-Box Testing
- (d) None of the above

14. Every design feature and its corresponding code is checked logically with every possible path execution in _____.

(a) Black-box testing

(b) White-box testing

- (c) Testing tool
- (d) None of the above

Unit-2 [Chapter-4, 5, 6]

Chapter-4

1. Black-box testing is a _____.

(a) Static testing

(b) Dynamic testing

- (c) None of the above

2. It has been observed that test cases, which are designed with boundary input values, have a _____ chance of finding errors.
(a) High
(b) Low
(c) Medium
(d) Zero
3. How many test cases are there in BVC if there are 5 variables in a module?
(a) 23
(b) 13
(c) 10
(d) 21
4. How many test cases are there in robustness testing if there are 5 variables in a module?
(a) 23
(b) 31
(c) 10
(d) 21
5. How many test cases are there in worst-case testing if there are 4 variables in a module?
(a) 623
(b) 513
(c) 625
(d) 521
6. Each row of state table corresponds to _____.
(a) Input
(b) State
(c) Transition
(d) None of the above
7. Each column of state table corresponds to _____.
(a) Input
(b) State
(c) Transition
(d) None of the above
8. Intersection of a row and a column specifies _____.
(a) Input
(b) State
(c) Transition and output
(d) None of the above
9. What are the components of a decision table?
(a) Condition stub
(b) Condition entry
(c) Action stub
(d) All

10. If there are k rules over n binary conditions, there are at least _____ test cases and at the most _____ test cases.
- (a) $k+2, 2n+2$
 - (b) $k+3, 2n+3$
 - (c) $k, 2n$**
 - (d) None of the above
11. Boundary value analysis and equivalence class partitioning methods do not consider _____.
- (a) Combinations of input conditions**
 - (b) Inputs
 - (c) Outputs
 - (d) None

Chapter-5

1. White-box testing is _____ to black-box testing.
- (a) mutually exclusive
 - (b) complementary**
 - (c) not related
2. The effectiveness of path testing rapidly _____ as the size of software under test.
- (a) decreases
 - (b) increases**
 - (c) does not change
 - (d) none of the above
3. A node with more than one arrow leaving it is called a _____
- (a) decision node**
 - (b) junction node
 - (c) region
 - (d) all of the above
4. A node with more than one arrow entering it is called a _____
- (a) decision node
 - (b) junction node**
 - (c) region
 - (d) all of the above
5. Areas bounded by edges and nodes are called _____
- (a) decision node
 - (b) junction node
 - (c) region**
 - (d) all of the above
6. The length of a path is measured by the number of _____
- (a) instructions
 - (b) junction nodes
 - (c) decision nodes

(d) links

7. An independent path is any path through the graph that introduces at least _____ new set of processing statements or new conditions.
(a) 4
(b) 3
(c) 1
(d) 2
8. The number of independent paths is given by _____.
(a) $V(G) = e - n + 1$
(b) $V(G) = 2e - n + 1$
(c) $V(G) = e - n + 2$
(d) none of the above
9. According to Mill's Theorem, _____.
(a) $V(G) = d + 2P$
(b) $V(G) = d + P$
(c) $V(G) = 2d + P$
(d) None of the above

Chapter 6

1. In static testing, a bug is found at its _____ location.
(a) Exact
(b) Nearby
(c) None of the above
2. Static testing can be applied for most of the _____.
(a) Validation activities
(b) Verification activities
(c) SDLC activities
(d) None of the above
3. Formal peer evaluation of a software element whose objective is to verify that the software element satisfies its specifications and conforms to standards, is called _____.
(a) Walkthrough
(b) Inspections
(c) Reviews
(d) None of the above
4. The programmer or designer responsible for producing the program or document is known as _____.
(a) Author
(b) Owner
(c) Producer
(d) All
5. The person who finds errors, omissions, and inconsistencies in programs and

documents during an inspection is known as _____ .

(a) Inspector

(b) Moderator

(c) Author

(d) Producer

6. The key person with the responsibility of planning and successful execution of inspection is known as _____ .

(a) Inspector

(b) Moderator

(c) Author

(d) Producer

7. The inspection team points out any potential errors or problems found and records them in _____.

(a) SDD

(b) SRS

(c) STD

(d) Log Form

8. 'How much evaluation of an item has been done by the team' is called _____ .

(a) Rate of errors

(b) Rate of inspection

(c) Rate of failures

(d) None of the above

9. _____ is a more formal process.

(a) Walkthroughs

(b) Inspection

(c) Reviews

(d) None of the above

10. A review is similar to an inspection or walkthrough, except that the review team also includes _____.

(a) Customer

(b) Developer

(c) Tester

(d) Management

Unit-3 [Chapter-7]

Chapter-7.

1. Software validation is achieved through a series of _____ tests that demonstrate conformity with requirements.

(a) white-box

(b) black-box

(c) unit tests

(d) none of the above

2. Before we validate the entire software, _____ must be validated first.
(a) modules
(b) system
(c) functionality
(d) all of the above
3. Unit tests ensure that the software meets at least a _____ of functionality prior to integration and system testing.
(a) high-level
(b) low-level Validation Activities
(c) baseline level
(d) none of the above
4. Two types of interface modules which must be simulated, if required, to test the module are _____.
(a) unit and integration
(b) simulators and emulators
(c) stubs and drivers
(d) none of the above
5. Overhead of stubs and drivers may increase the _____ of the entire software system.
(a) test cases
(b) time
(c) cost
(d) time and cost
6. Integration of modules is according to the _____ of software.
(a) design
(b) coding
(c) specifications
(d) all of the above
7. Recovery is the ability of a system to _____ operations after the integrity of the application has been lost.
(a) suspend
(b) observe
(c) restart
(d) all of the above
8. A system that meticulously records transactions and system states periodically so that these are preserved in case of a failure is called a _____.
(a) checkpoint
(b) transaction system
(c) recovery system
(d) none of the above
9. Security requirements should be associated with each _____ requirement.
(a) functional
(b) design
(c) coding

(d) testing

10. Measures intended to allow the receiver to determine that the information which it receives has not been altered in transit is known as _____.

(a) confidentiality

(b) integrity

(c) authentication

(d) none of the above

11. The process of determining that a requester is allowed to receive a service or perform an operation is called _____.

(a) confidentiality

(b) integrity

(c) authentication

(d) authorization

12. A measure intended to prevent the later denial that an action happened, or a communication took place is called _____.

(a) confidentiality

(b) integrity

(c) non-repudiation

(d) authorization

13. Acceptance testing must occur at the _____ of the development process.

(a) start

(b) end

(c) middle

(d) none of the above

14. The total number of sessions in a pair-wise call graph-based integration testing is _____.

(a) total edges in the graph + 2

(b) nodes + leaves

(c) nodes – leaves + edges

(d) total edges in the graph

15. Total number of sessions in neighborhood call graph-based integration testing is _____.

(a) total edges in the graph + 2

(b) nodes + sink nodes

(c) nodes – leaves + edges

(d) nodes – sink nodes

16. The nodes where the control is being transferred after calling the module, are called _____.

(a) sink nodes

(b) source nodes

(c) message

(d) none of the above

17. The nodes from which the control is transferred are called _____.

- (a) **sink nodes**
 - (b) source nodes
 - (c) message
 - (d) none of the above
18. When the control from one unit is transferred to another unit, then the programming language mechanism used to do this is known as
- (a) sink nodes
 - (b) source nodes
 - (c) **message**
 - (d) none of the above
19. A call graph is a _____.
- (a) undirected graph
 - (b) cyclic graph
 - (c) **directed graph**
 - (d) none of the above

Unit-4

1. The ____ criteria specify when a test activity is started. - **entry**
2. The ____ criteria specify when a test cycle can be completed. - **exit**
3. A test cycle is an isolated activity. [True/ False] – **False** (It is continuous activity)
4. ____ is done based on estimation of effort involved and availability of time for release. -
Staffing
5. ____ standards are externally visible to the customers. - **External**
6. ____ standards are formulated by a testing organization. - **Internal**
7. The elements of test infrastructure management are ____, ____ and ____ - **TCDB, DR, CM**
8. TCDB stands for ____ - **Test Case Database**
9. DR stands for ____ - **Defect Repository**
10. SCM stands for ____ - **Software configuration management**
11. The ____ contains all the information about the test cases in an organization. - **TCDB**
12. The ____ captures all the details of defects reported for a product. - **DR**
13. A ____ keeps track of change control and version control of all the files. – **SCM or CM**
14. A ____ is a tool used to validate that every requirement is tested. – **Traceability matrix**
15. Using the test plan, the ____ is designed. – **Test case specifications**
16. A report that summarizes the results of a test cycle is the ____ report. – **Test Summary Report**
17. A ____ is a communication that happens through the testing cycle when defects are encountered. – **Test Incident Report**
18. A ____ gives summary of the activities carried out during the testing cycle. – **Test Cycle Report**