

## B.C.A. Sem.-6 (Rep) Examination

CC-307

Software Testing

October-2025

Time : 2-30 Hours]

[Max. Marks : 70

**Question: 1**

[A] Define the term: Software Testing. Discuss Immediate, Long-term and Post-implementation goal of it. [07]

OR

[A] Do as directed:

1. Explain the terms: Failure, Fault and Error [03]
2. Discuss validation activities of V-Testing Life Cycle model. [04]

[B] Explain Software Testing Life Cycle (STLC) with its different phases in detail. [07]

OR

[B] Do as directed:

1. Draw a figure of V-Testing life cycle testing. [03]
2. Write a short note on: Dynamic testing [04]

**Question: 2**

[A] What is Black-Box Testing? List different methods of Black-Box testing and discuss Equivalence class testing in detail. [07]

OR

[A] Prepare the test-cases based on the following scenarios:

1. A program computes  $a^b$  where  $a$  lies in the range [1, 10] and  $b$  within [1, 5]. Design test cases for this program using BVC, robust testing, and worst-case testing methods. [03]
2. A program reads three numbers, A, B, and C, with a range [1, 50] and prints the largest number. Design test cases for this program using equivalence class testing technique. [04]

[B] What is White-Box Testing? List different methods of White-Box testing and discuss basis path testing method in detail. [07]

OR

[B] Write short-notes on the following:

1. Decision table. [03]
2. Inspection. [04]

**Question: 3**

[A] What is Integration Testing? Discuss neighborhood integration testing with an example. [07]

OR

[A] Describe the following terms in detail:

1. Drivers [03]
2. Stub [04]

[B] What is Acceptance Testing? Discuss different types of testing can be performed during acceptance testing? [07]

OR

[B] Write a short note on following:

1. Pair-wise Integration [03]
2. Unit Validation Testing [04]

**Question: 4**

[A] What is test planning? Discuss test plan preparation, scope management and test strategies in brief. [07]

OR

[A] What is test reporting? Explain different types of test summary reports. [07]

( P.T.O )

- [B] What is test management? Discuss choice of standards in detail. [07]  
OR  
[B] Write a short note on: Test Infrastructure Management. [07]

**Question: 5** Answer the following MCQs (Any Seven): [14]

- [1] Reduced maintenance is a \_\_\_\_\_ goal of software testing.  
[A] Long-Term [C] Post-Implementation  
[B] Short-Term [D] All of the above
- [2] Fault is synonymous with the word \_\_\_\_\_.  
[A] Failure [C] Error  
[B] Defect [D] All of the above
- [3] Testing process starts as soon as the \_\_\_\_\_ for the system are prepared.  
[A] Design [C] Specifications  
[B] Coding [D] None of the above
- [4] 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] Validation [C] SDLC  
[B] Verification [D] Checking
- [5] How many test cases are there in BVC if there are 5 variables in a module?  
[A] 23 [C] 13  
[B] 17 [D] 21
- [6] Intersection of a row and a column specifies \_\_\_\_\_.  
[A] Transition and output [C] Input  
[B] State [D] None of the above
- [7] The inspection team points out any potential errors or problems found and records them in \_\_\_\_\_.  
[A] SDD [C] STD  
[B] SRS [D] Log Form
- [8] A node with more than one arrow leaving it is called a \_\_\_\_\_.  
[A] Junction node [C] Region  
[B] Decision node [D] Root node
- [9] How many test cases are there in worst-case testing if there are 3 variables in a module?  
[A] 125 [A] 125  
[B] 625 [B] 625
- [10] Recovery is the ability of a system to \_\_\_\_\_ operations after the integrity of the application has been lost.  
[A] Suspend [C] Observe  
[B] Restart [D] All of the above
- [11] The \_\_\_\_\_ contains all the information about the test cases in an organization.  
[A] DR [C] SCM  
[B] SRS [D] TCDB
- [12] A report that summarizes the results of a test cycle is the \_\_\_\_\_ report.  
[A] Test Incident Report [C] Test Cycle Report  
[B] Test Summary Report [D] None of the above
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