21IS63

USN

Sixth Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025
Software Testing

Time: 3 hrs.　　　　　　　　　　　　　　　　　　　　　　　　Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1　a. List and explain error and fault taxonomies. (07 Marks)
　　b. Discuss Quality attributes in detail associated with software quality. (07 Marks)
　　c. What are Test Cases? Explain testing life cycle. (06 Marks)

OR

2　a. How can we identify test cases using function and structural testing explain? Also write their differences. (10 Marks)
　　b. Explain triangle problem with structural implementation. (10 Marks)

Module-2

3　a. Explain Boundary – Value – Analysis with its types, examples and limitations. (10 Marks)
　　b. Draw Decision table with rule count for triangle problem, Also list and explain different types of Decision Tables. (10 Marks)

OR

4　a. Explain Equivalence class analysis and its types and write testcases for next data function. (10 Marks)
　　b. Write the test cases for the following :
　　　　i) Apply Boundary value Analysis for commission problem
　　　　ii) Apply equivalence class testing for commission problem. (10 Marks)

Module-3

5　a. Explain statement, Block and condition converge with suitable code. (10 Marks)
　　b. Explain Mc Cabes Basis path testing. (10 Marks)

OR

6　a. Define Data flow Testing. Define all the definitions involved in dataflow testing. (10 Marks)
　　b. Explain Test – converge metrics for path testing proposed by EF miller. (10 Marks)

Module-4

7　a. Explain alternative life cycle models in software testing. (10 Marks)
　　b. Explain SATM in brief, draw and explain context diagram and dataflow diagram of SATM. (10 Marks)

OR

8　a. Explain Decomposition based integration testing. (10 Marks)
　　b. Explain Call graph based integration testing. (10 Marks)

Module-5

9　a. Illustrate Basic concept for requirements specification. (10 Marks)
　　b. Explain Functional strategies for Thread Testing. (10 Marks)

OR

10　a. Explain taxonomy of interactions and explain their dynamic interaction in a single and multiple processors. (10 Marks)
　　b. Explains Client – Server Testing with a neat diagram. (10 Marks)

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