CBCS SCHEME

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21IS63

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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