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17CS552

Fifth Semester B.E. Degree Examination, Jan./Feb. 2021
Introduction to 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. Discuss the quality attributes in detail, to determine the software quality. **(10 Marks)**
   b. Explain in details about how identifying test cases is done in software testing. **(10 Marks)**

OR

2 a. With a neat diagram of a testing life cycle explain following:
       i) Fault   ii) Failure   iii) Incident   iv) Test case **(10 Marks)**
   b. Explain Testing and Debugging cycle with a diagram. **(10 Marks)**

Module-2

3 a. Explain test case for the triangle problem with respect to decision table based testing with examples. **(12 Marks)**
   b. What are Decision Tables? Draw the Decision table for triangle problem. **(08 Marks)**

OR

4 a. List and explain equivalence class testing with diagram write equivalence class test case for triangle problem. **(12 Marks)**
   b. With examples explain boundary value analysis with respect to
       i)   Generalizing boundary value analysis
       ii)   Limitations of boundary value analysis. **(08 Marks)**

Module-3

5 a. Explain in detail about McCabe's basis path method using graph theory. **(08 Marks)**
   b. Explain in detail define/use testing with example. **(12 Marks)**

OR

6 a. Explain about slice based testing in a data flow testing with example. **(10 Marks)**
   b. With example explain DD-Paths in path testing. **(10 Marks)**

Module-4

7 a. Explain in detail quality and process in software planning. **(10 Marks)**
   b. What is a test oracles? With a neat diagram explain the comparison based test oracles. **(10 Marks)**

OR

8 a. What is Scaffolding? Distinguish between Generic Versus Specific Scaffolding. **(08 Marks)**
   b. Explain the basic principles process frame work. **(12 Marks)**

Module-5

9 a. Describe decomposition based integration and its goals. Explain the different types of decomposition based on integration. **(08 Marks)**
   b. Explain different types of testing strategies in integration testing. **(12 Marks)**

OR

10 a. Describe basic problem of regression test in integration testing. **(10 Marks)**
    b. Explain the following: i) Acceptance testing   ii) System testing. **(10 Marks)**

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