CBCS SCHEME

USN | | | | | | | | | | |

18IS62

Sixth Semester B.E. Degree Examination, June/July 2024
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. Explain in detail about test case and its execution. **(08 Marks)**

b. Define error and fault. Explain sample test plan for sort program. **(12 Marks)**

OR

2 a. Define Software Quality. List and explain the several measures of software quality. **(10 Marks)**

b. Explain with neat diagram the Currency converter and Saturn wind shield wiper controller. **(10 Marks)**

Module-2

3 a. Explain the process of Boundary value analysis in detail with example. **(10 Marks)**

b. Develop test case using robust worst BVA testing for triangle problem. **(10 Marks)**

OR

4 a. Explain the variants of equivalence class testing. Derive equivalence class test case for next date problem. **(10 Marks)**

b. Briefly explain Mutation Analysis step. **(05 Marks)**

c. Write note on Mutation Analysis **(05 Marks)**

Module-3

5 a. Illustrate the process of McCabe's basis path method with example. **(10 Marks)**

b. Define Do Path graph. Draw program graph and derive DD path graph for triangle problem. **(10 Marks)**

OR

6 a. What is slice based testing? Explain slice based testing with guideline and observation in detail. **(12 Marks)**

b. Define scaffolding and test oracle. Explain with example. **(08 Marks)**

Module-4

7 a. List the basic principles in process framework and explain any 2 principle in detail. **(10 Marks)**

b. Explain the 2 main steps of orthogonal detect classification. **(05 Marks)**

c. Discuss how to improve the processes. **(05 Marks)**

OR

8 a. List and explain steps involved in documenting analysis and test. **(10 Marks)**

b. Why organizational factors are needed in process framework? **(05 Marks)**

c. Explain dependability properties in process framework. **(05 Marks)**

Module-5

9 a. Explain SATM system in brief. Draw and explain context diagram and Dataflow diagram of SATM system. **(12 Marks)**

b. Define Acceptance and regression testing. Explain each of them briefly. **(08 Marks)**

OR

10 a. List all types of integration testing technique and demonstrate any 2 types of integration testing technique with example. **(14 Marks)**

b. Name various level of testing and illustrate specification based lifecycle model with neat diagram. **(06 Marks)**

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