



CBCS SCHEME

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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