



CBCS SCHEME

21IS63

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2026 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. Identify and explain Fault Taxonomies with an example. (10 Marks)
- b. Explain the use of Venn diagram in Software Testing with diagrams. (10 Marks)

OR

- 2 a. Discuss the structured programming version of Improved Specification for triangle problem with Data flow diagram. (06 Marks)
- b. Explain various Software quality attributes. (08 Marks)
- c. Analyze and explain the SATM screen. (06 Marks)

Module-2

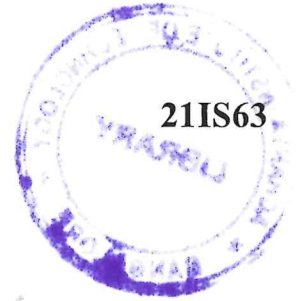
- 3 a. Briefly explain Generalized normal, Worst-Case and Robust boundary value and robust-worst-case BVA testing with input domain diagram for function of two variables. (08 Marks)
- b. Define equivalence class testing. Derive test-cases for weak robust equivalence class for commission problem. (08 Marks)
- c. Write a short note on Special Value Testing. (04 Marks)

OR

- 4 a. Explain the decision table for next date program under the Third-Try and also write the test-cases. (10 Marks)
- b. Explain each term related to decision table along with an example for a commission program and also write the test-cases. (10 Marks)

Module-3

- 5 a. Analyze and explain metric-based testing. (10 Marks)
- b. Design code in 'C' language to implement if a given year is a leap year or not. Using the basis path method, write different test-cases. (10 Marks)



OR

- 6 a. Consider the commission program and find the DU Paths for the following variables. Also identify whether these DU Paths are definition clear or not.

- i) Sales
- ii) Total Stock
- iii) Locks

(10 Marks)

- b. Develop a Code in 'C' program to implement the binary search algorithm. Determine the basis path testing using different test-cases.

(10 Marks)

Module-4

- 7 a. Explain Rapid Prototyping Life Cycle with diagram.

(10 Marks)

- b. Explain Decomposition-Based integration.

(10 Marks)

OR

- 8 a. Explain Level-1 dataflow diagram of the SATM System.

(10 Marks)

- b. Explain the Call-Graph-Based integration.

(10 Marks)

Module-5

- 9 a. With a neat diagram explain PIN try Finite State Machine of SATM.

(10 Marks)

- b. Explain with an example Static Interaction in a single processor.

(10 Marks)

OR

- 10 a. With a neat diagram explain Client/Server Testing.

(10 Marks)

- b. Explain Hypothetical transition probabilities for the SATM system.

(10 Marks)

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