

CBBCS SCHEME

21IS63



Sixth Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026 Software Testing

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Define Error, Fault, Failure, Incident, Test case with reference to software testing. (10 Marks)
- b. List quality attributes of software testing. (04 Marks)
- c. Explain a Test/debug cycle with diagram. (06 Marks)

OR

- 2 a. Explain the fundamental approaches used to identify test cases. (06 Marks)
- b. Explain the significance of Venn diagram in software testing. (08 Marks)
- c. Identify and explain fault taxonomies in brief. (06 Marks)

Module-2

- 3 a. What are the limitations of boundary value analysis? (06 Marks)
- b. Differentiate weak robust equivalence class testing and strong robust equivalence class testing. (08 Marks)
- c. Explain Worst case testing with an example. (06 Marks)

OR

- 4 a. Briefly explain the variants of equivalence class testing and derive equivalence class test cases for NextDate problem. (10 Marks)
- b. Explain decision table. Construct decision table of the triangle problem. It accepts 3 integers a, b and c as 3 sides input outputs, 3 types of triangle: equilateral, scalene, isosceles or not a triangle and satisfy the following conditions :
 $a < b + c$, $b < a + c$ and $c < a + b$. (10 Marks)

Module-3

- 5 a. Define DD path graph. Draw the DD path graph for triangle problem. (10 Marks)
- b. Explain EF Miller's coverage metrics in brief. (10 Marks)

OR

- 6 a. Explain define/use testing with example. (10 Marks)
- b. Explain slice based testing with example. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-4

- 7 a. Explain Traditional water fall testing with neat diagram. (10 Marks)
b. Explain SATM system. (10 Marks)

OR

- 8 a. Explain TOP Down-De composition, Based Integration Testing in brief. (10 Marks)
b. Explain call Graph-Based Integration Testing. (10 Marks)

Module-5

- 9 a. Explain model based threads with illustration. (10 Marks)
b. Explain basis concepts for requirement specification. (10 Marks)

OR

- 10 a. Explain use case-based threads in brief. (10 Marks)
b. Explain a taxonomy of interaction testing. (10 Marks)
