



CBCS SCHEME

17IS63

Sixth Semester B.E. Degree Examination, July/August 2022 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. Define the following terms : i) Error ii) Fault iii) Failure iv) Test v) Test case vi) Incident and draw the flow diagram of a testing life cycle. (10 Marks)
b. Explain about functional and structural testing. (10 Marks)

OR

- 2 a. Explain the error and fault taxonomies and IEEE standard anomaly resolution process. (10 Marks)
b. State the triangle problem with all its conditions, explain the traditional implementation. (10 Marks)

Module-2

- 3 a. Explain the format of decision table. Build decision table for simple version of triangle problem. (10 Marks)
b. With examples, explain boundary value analysis with respect to i) Generalizing boundary value ii) Limitations of boundary value. (10 Marks)

OR

- 4 a. Explain Robustness testing, worst case testing and equivalences testing analysis. (10 Marks)
b. Explain the weak normal and strong robust equivalence class testing with next date problem as an example. (10 Marks)

Module-3

- 5 a. Write a note on : i) Statement testing ii) Branch testing. (10 Marks)
b. What is DD-path? Explain basis path testing with suitable example. (10 Marks)

OR

- 6 a. What is the use of data flow testing? List and define various terms in data flow testing. (10 Marks)
b. Explain Scaffolding. Differentiate between generic and specific scaffolding. (10 Marks)

Module-4

- 7 a. Explain test oracles and self chart as oracle in detail. (10 Marks)
b. Explain the following principles :
i) Sensitivity ii) Redundancy iii) Partition iv) Visibility v) Feedback. (10 Marks)

OR

- 8 a. List and explain risks in process and quality management. (10 Marks)
b. List and explain dependability properties with example. (10 Marks)

Module-5

- 9 a. Explain call graph based integration testing. (10 Marks)
b. Explain : i) Acceptance testing ii) Usability testing. (10 Marks)

OR

- 10 a. Explain decomposition based integration testing. (10 Marks)
b. Explain the context diagram of SATM system. (10 Marks)

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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.