CBCS SCHEME

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

18IS62

Sixth Semester B.E. Degree Examination, Dec.2024/Jan.2025
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 program behavior insights from a Venn Diagram for functional testing and structural testing. **(10 Marks)**

b. Identify and explain fault taxonomies with example. **(10 Marks)**

OR

2 a. With the flowchart for the traditional triangle problem implementation. **(10 Marks)**

b. Analyse and explain the SATM screen. **(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. Analyze and explain metric – based testing. **(10 Marks)**

b. Explain define/Use testing with example. **(10 Marks)**

OR

6 a. Describe about scaffolding. Discuss about Generic versus specific scaffolding. **(08 Marks)**

b. Define :
i) Test oracles
ii) Self – checks
iii) Capture
iv) Replay. **(12 Marks)**

Module-4

7 a. Explain about the following basic principle of Testing process framework.
i) Sensitivity
ii) Restriction. **(08 Marks)**

b. What are dependability properties in testing process framework? Explain with diagram. **(08 Marks)**

c. Write short notes on Test design specification document. **(04 Marks)**

OR

8 a. Explain in detail about the Risk management interms of process and quality management. List out various Risks and their control tactics in both. **(10 Marks)**

b. Write short notes on the following :
i) Organizing documents
ii) Test and analysis Reports. **(10 Marks)**

Module-5

9 a. Analyze and explain integration testing strategies. **(10 Marks)**

b. What is regression testing? Explain regression test selection technique. **(10 Marks)**

OR

10 a. Explain Rapid Prototyping Life Cycle with diagram. **(10 Marks)**

b. Explain Decomposition – Based Integration. **(10 Marks)**

* * * * *