CBCS SCHEME

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

18IS62

Sixth Semester B.E. Degree Examination, June/July 2023
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. Write a program to solve the triangle problem. Derive test cases for program based on boundary value analysis. **(10 Marks)**

b. Write a program to solve commission problem. Analyze it from the perspective of equivalence class testing and derive the test cases. **(10 Marks)**

OR

4 a. Write a program to solve the triangle problem. Derive test cases for program based on decision table approach. **(10 Marks)**

b. List the assumptions made in fault based testing and explain the mutation analysis with sample program. **(10 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 the basic principles in the frame work for test and analysis. **(12 Marks)**

b. List and explain the dependability properties test and analysis actives. **(08 Marks)**

OR

8 a. Explain Software Reliability Engineered Testing (SRET) approach with diagram. **(10 Marks)**

b. Identify and explain risk management in quality plan with respect to generic and specific issues. **(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)**

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