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10IS65

Sixth Semester B.E. Degree Examination, July/August 2022
Software Testing

Time: 3 hrs. Max. Marks:100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

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.

PART – A

1 a. What are the two different fundamental approaches used to identify test cases? Explain them in brief with neat diagram. **(10 Marks)**

b. Draw a neat dataflow diagram for a structured triangle program implementation. Explain in brief different conditions. **(10 Marks)**

2 a. (i) Explain Robustness Testing. **(05 Marks)**

(ii) What are the limitations of Boundary Value Analysis? **(05 Marks)**

b. Write the equivalence class test cases for the NextDate function. **(10 Marks)**

3 a. Explain in brief McCabe's Basis Path Method, and find the cyclomatic complexity for the following graph Fig.Q3(a). Show the Path/Edge Traversal Table.

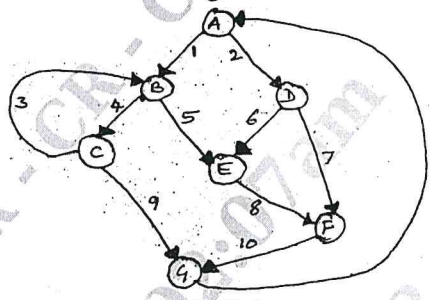

Fig.Q3(a) **(10 Marks)**

b. Explain Slice-Based Testing. **(10 Marks)**

4 a. Explain Entity/relationship model of the SATM system. **(10 Marks)**

b. Explain Top-Down and Bottom-up methods of Integration Testing. **(10 Marks)**

PART – B

5 a. Explain different functional strategies for Thread Testing. **(10 Marks)**

b. With a neat diagram, explain Client/Server Testing. **(10 Marks)**

6 a. Explain validation and verification in detail. **(10 Marks)**

b. (i) Define partition. Explain in brief. **(05 Marks)**

(ii) List different types of Quality Goals. **(05 Marks)**

7 a. Explain different Test Oracles. **(10 Marks)**

b. Explain Fault-Based Testing-Terminology. **(10 Marks)**

8 Write short notes for the following:

a. Test and Analysis plans **(05 Marks)**

b. The 80/20 or Pareto Rule **(05 Marks)**

c. Organizing Documents **(05 Marks)**

d. Test Strategy Document **(05 Marks)**

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