CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III–B.TECH–II–Semester End Examinations (Regular) - June- 2024
SOFTWARE TESTING METHODOLOGIES
(CSM)

[Time: 3 Hours]   [Max. Marks: 70]

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A   (20 Marks)

1. a) Define Bug.   [2M]
   b) Define Path Testing.   [2M]
   c) What is Nice Domain?   [2M]
   d) Define Transaction flow testing.   [2M]
   e) Define Decision Tables.   [2M]
   f) What do you mean by KV charts.   [2M]
   g) Define State Graphs.   [2M]
   h) What is Good State Graphs.   [2M]
   i) Define the matrix of a graph.   [2M]
   j) Define Node Reduction algorithm.   [2M]

PART-B   (50 Marks)

2. Describe the concept of flow graphs in software testing.   [10M]

OR

3. Explain the taxonomy of bugs in software testing.   [10M]

4. Describe different transaction flow testing techniques.   [10M]

OR

5. Analyze how the characteristics of domains and interfaces impact the testability of software systems.   [10M]

6. Discuss the significance of specifications in logic-based testing.   [10M]

OR

7. Explain how the reduction procedure helps simplify and manage the complexity of testing multiple paths.   [10M]

8. Evaluate how state graphs are used to represent the behavior and transitions of a software system.   [10M]

OR

9. Explain the concept of fault-based testing in state and transition testing.   [10M]

10. Explain the concept of a matrix of a graph.   [10M]

OR

11. Elaborate WinRunner as a tool for software testing.   [10M]

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