Code No.: CS743PE | R20 | H.T.No. | | | 8 | R | | | | |

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–I–Semester End Examinations (Supply) - December- 2025
SOFTWARE TESTING METHODOLOGIES
(CSE)

[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) What is meant by integration testing?   [2M]
   b) What are control and sequence bugs?   [2M]
   c) Distinguish Control Flow and Transaction flow?   [2M]
   d) What is meant by a program slice?   [2M]
   e) What are decision tables?   [2M]
   f) Write about the ambiguities and contradictions in specifications?   [2M]
   g) What are the software implementation issues in state testing?   [2M]
   h) Write testers comments about state graphs?   [2M]
   i) How can the graph be represented in Matrix form?   [2M]
   j) Write about loops in matrix representation?   [2M]

PART-B   (50 Marks)

2. State and explain various dichotomies in software testing?   [10M]
                                    OR
3. State and explain various kinds of predicate blindness with examples?   [10M]

4. Compare data flow and path flow testing strategies?   [10M]
                                    OR
5. What is meant by domain testing? Discuss the various applications of domain testing?   [10M]

6. Reduce the following functions using K-Maps   [10M]
   F(A,B,C,D)=P(4,5,6,7,8,12,13)+d(1,15)
                                    OR
7. Discuss Path Sums and Path Product with examples?   [10M]

8. What are the principles of state testing. Discuss advantages and disadvantages?   [10M]
                                    OR
9. Explain about good state and bad state graphs with examples?   [10M]

10. Explain node term reduction optimization?   [10M]
                                    OR
11. What are graph matrices and their applications?   [10M]

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