Code No.: AI621PE   R20   H.T.No. [| | 8 | R | | | |]

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III–B.TECH–II–Semester End Examinations (Supply) - January- 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)	What is the purpose of the testing?	[2M]
b)	Define Path Testing.	[2M]
c)	Define Transaction flow testing.	[2M]
d)	What is nice Domain?	[2M]
e)	Define Path Product.	[2M]
f)	Define Decision Tables.	[2M]
g)	Define State Graphs.	[2M]
h)	Define Good State Graphs.	[2M]
i)	Define matrix of a graph.	[2M]
j)	Define Node Reduction algorithm.	[2M]

PART-B   (50 Marks)

2. Discuss the consequences of bugs in software systems and Explain life cycle of bug. [10M]

OR

3. Describe path instrumentation and its role in path testing. [10M]

4. Describe different strategies used in dataflow testing. [10M]

OR

5. Discuss how the characteristics of domains and interfaces impact the testability of [10M] software systems and the strategies to improve testability.

6. Discuss the significance of identifying and testing different paths within a software [10M] program.

OR

7. Explain how KV charts are used to analyze and represent combinations of inputs and [10M] outputs to design effective test cases.

8. Explain the concept of testability in software testing. [10M]

OR

9. Discuss the importance of traceability in state and transition testing. [10M]

10. Explain the power of a matrix in the context of graph matrices. [10M]

OR

11. Discuss the challenges and considerations involved in using tools like JMeter or [10M] WinRunner in software testing.

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