

## CMR Technical Campus

### B. Tech Mid Question Bank (R22 Regulation)

**Academic Year: 2024-25**

**Semester: VI**

**Subject Name: Software Testing Methodologies**

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#### PART-A

MID-I Questions					
Q. No	Questions	Marks	BL	CO	Unit No
1	Explain the consequences of bugs.	2M	BL1	CO1	I
2	What is Pesticide Paradox?	2M	BL2	CO1	I
3	Define Testing, what is the purpose of Testing?	2M	BL1	CO1	I
4	Define Path Testing and Code Coverage.	2M	BL2	CO1	I
5	List the various bug hypothesis.	2M	BL1	CO1	I
6	List and explain the testing various types of loops.	2M	BL1	CO1	I
7	Define Transaction testing, List various Births.	2M	BL1	CO2	II
8	What is a domain? Explain Open and Closed Domains.	2M	BL2	CO2	II
9	Explain the Clear Path Segment.	2M	BL2	CO2	II
10	List various Data Flow Anamolies.	2M	BL3	CO2	II
11	What are the possible Domain Bugs for one Dimensional Open Domain Boundry?	2M	BL1	CO2	II
12	What is Transaction flow testing? Give example?	2M	BL1	CO2	II
13	List various Domain Errors.	2M	BL2	CO3	III
14	Define Path Sum, Path Product and Path Expression.	2M	BL2	CO3	III
15	What is path? Provide overview of path selection criteria	2M	BL1	CO3	III
MID-II Questions					
16	What is a Decision table? Explain different parts or elements of Decision table.	2M	BL1	CO3	III
17	Explain Immaterial cases?	2M	BL3	CO3	III
18	List and explain rules of Boolean algebra.	2M	BL2	CO3	III
19	Define State and Transition.	2M	BL2	CO4	IV
20	What is a state graph?	2M	BL2	CO4	IV
21	Define State.	2M	BL3	CO4	IV
22	Give various improper state graphs.	2M	BL2	CO4	IV
23	Explain the concept of state transition.	2M	BL2	CO4	IV

24	What is a state table? Explain with example.	2M	BL1	CO4	IV
25	Explain Connection Matrix.	2M	BL1	CO5	V
26	How can the Graph be represent in Matrix form?	2M	BL1	CO5	V
27	Explain the Matrix of a Graph in detail.	2M	BL3	CO5	V
28	Give Introduction to Win runner.	2M	BL2	CO5	V
29	Explain Connection matrix and Cyclomatic Complexity.	2M	BL3	CO5	V
30	List various steps in Matrix reduction process.	2M	BL2	CO5	V

## PART-B

MID-I Questions					
Q. No	Questions	Marks	BL	CO	Unit No
1	List and explain the testing various types of loops.	4M	BL1	CO1	I
2	List and explain Various Dichotomies.	4M	BL2	CO1	I
3	What is Nightmare List and when to stop testing?	4M	BL3	CO1	I
4	List and explain various bug hypothesis in detail.	4M	BL1	CO1	I
5	Is complete testing possible? Explain.	4M	BL2	CO1	I
6	What is meant by program's control flow? How it Useful for path testing?	4M	BL2	CO1	I
7	Define path sensitization. Explain Heuristic procedure for sensitizing paths with the help of an Example.	8M	BL3	CO1	I
8	What are phases in a tester mental Life?	8M	BL1	CO1	I
9	Explain in detail about Taxonomy of Bugs.	8M	BL3	CO1	I
10	List various Mergers in Transaction testing and explain	4M	BL2	CO2	II
11	Explain about domain testing.	4M	BL2	CO2	II
12	Explain domains and testability.	4M	BL2	CO2	II
13	Explain in detail about Transaction Births.	4M	BL2	CO2	II
14	Discuss about: i)Nonlinear domain boundaries ii)Comple domain boundaries	4M	BL2	CO2	II
15	Explain Applications of dataflow testing.	4M	BL2	CO2	II
16	Explain in detail about Nice and Ugly Domains?	8M	BL2	CO2	II
17	Discuss briefly about transaction flow testing techniques	8M	BL2	CO2	II
18	Explain in detail about Data Flow Graph with a neat example?	8M	BL2	CO2	II
19	Explain Node Reduction Procedure in detail?	4M	BL2	CO3	III
20	Explain Max Path Count with an example?	4M	BL2	CO3	III
21	How an Anomaly can be detected? explain different types of data flow Anomaly state graph	4M	BL2	CO3	III

MID-II Questions					
22	Construct KV Chart with following data $F(A,B,C,D)=\sum(0,1,2,5,8,9,10)$	4M	BL2	CO3	III
23	What is a Decision Table? Explain.	4M	BL3	CO3	III
24	Explain Power of Matrix in detail.	4M	BL3	CO3	III
25	What is a state table? Explain with example?	4M	BL3	CO4	IV
26	Explain Good and Bad State Graphs in detail.	4M	BL3	CO4	IV
27	Explain Impact of Bugs on State Testing.	4M	BL3	CO4	IV
28	Explain Improper State Graphs.	4M	BL3	CO4	IV
29	Explain about State testing.	4M	BL2	CO4	IV
30	Explain testability tips.	4M	BL2	CO4	IV
31	Can you explain the process of determining number of states in a state graph?	8M	BL2	CO4	IV
32	How to identify equivalent states and how to merge them in representing state graph? Explain.	8M	BL2	CO4	IV
33	Explain in detail about good and bad state graphs	8M	BL4	CO4	IV
34	Explain the Matrix of a Graph in detail.	4M	BL3	CO5	V
35	What are the steps in Matrix Node Reduction Process?	4M	BL3	CO5	V
36	Explain Power of a Matrix.	4M	BL2	CO5	V
37	Explain Connection matrix and Cyclomatic Complexity.	4M	BL3	CO5	V
38	Explain about motivational overview of graph matrices.	4M	BL3	CO5	V
39	What are relations and give their properties of relations	4M	BL2	CO5	V
40	Explain Graph Matrices and applications.	8M	BL3	CO5	V
41	Review and Explain the partition algorithm for software testing.	8M	BL5	CO5	V

42	Write the usage and applications of Win runner tools in software testing	8M	BL6	CO5	V
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