Question Bank:

UNIT-I

UNIT-I

S.No		Questions	BT	CO	PO
Part–A(Short Answer Questions)					
1		Define software testing.	L1	CO1	PO1
2		What is the purpose of testing?	L4	CO1	PO2
3		What are dichotomies in testing?	L3	CO1	PO1
4		What is a model for testing?	L2	CO2	PO1
5		Define bugs and explain consequences of bugs.	L1	CO1	PO2
6		What is taxonomy of bugs?	L4	CO2	PO2
7		Define flow graph.	L1	CO3	PO2
8		What is path testing?	L1	CO2	PO1
9		What are path predicates?	L1	CO1	PO1
10		What is path sensitizing?	L2	CO2	PO1
Part–B(Long Answer Questions)					
11	a)	Explain the purpose of testing, dichotomies, and the model for testing in detail.	L4	CO2	PO1, 2
	b)	Discuss the consequences of bugs and explain the taxonomy of bugs with examples.	L5	CO2	PO2
12	a)	Explain flow graphs with an example and describe basic elements of a flow graph.	L6	CO1	PO2, 3
	b)	Describe path testing and explain achievable paths, path predicates, and path sensitizing.	L3	CO2	PO3
13	a)	Explain the application of path testing in real-time software systems.	L1	CO3	PO3, 4
	b)	Explain the purpose of testing, dichotomies, and the model for testing in detail.	L2	CO2	PO4
14	a)	Discuss the consequences of bugs and explain the taxonomy of bugs with examples.	L3	CO3	PO5
	b)	Explain flow graphs with an example and describe basic elements of a flow graph.	L2	CO1	PO3
15	a)	Describe path testing and explain achievable paths, path predicates, and path sensitizing.	L3	CO2	PO2
	b)	Explain the application of path testing in real-time software systems.	L4	CO1	PO4

UNIT-II

S.No		Questions	BT	CO	PO
Part–A(Short Answer Questions)					
1		What is a transaction flow?	L3	CO1	PO2
2		Define transaction flow testing.	L1	CO2	PO3
3		List transaction flow testing techniques.	L2	CO3	PO5
4		What is data flow testing?	L3	CO1	PO7
5		What are data flow testing strategies?	L4	CO2	PO1
6		Define domain.	L5	CO2	PO5
7		What are Nice and Ugly domains?	L3	CO3	PO3
8		What is domain testing?	L1	CO1	PO7
9		What is interface testing?	L3	CO1	PO9
10		Define testability in domain testing	L2	CO2	PO4
Part–B(Long Answer Questions)					
11	a)	1. Explain transaction flows and transaction flow testing techniques with examples.	L3	CO1	PO2
	b)	2. Describe basics and strategies of data flow testing in detail.	L2	CO2	PO4
12	a)	3. Explain domains, Nice domains, and Ugly domains with suitable diagrams.	L4	CO1	PO6
	b)	4. Discuss domain testing and domain & interface testing in detail.	L3	CO2	PO7
13	a)	5. Explain domain testability and its importance in software testing.	L1	CO1	PO5
	b)	6. Explain transaction flows and transaction flow testing techniques with examples.	L2	CO3	PO7
14	a)	7. Describe basics and strategies of data flow testing in detail.	L2	CO2	PO5, 6
	b)	8. Explain domains, Nice domains, and Ugly domains with suitable diagrams.	L3	CO1	PO6
15	a)	9. Discuss domain testing and domain & interface testing in detail.	L4	CO2	PO7
	b)	10. Explain domain testability and its importance in software testing.	L1	CO3	PO8
16	a)	11. Explain transaction flows and transaction flow testing techniques with examples.	L2	CO2	PO4
	b)	12. Describe basics and strategies of data flow testing in detail.	L3	CO2	PO4

UNIT-III

S.No		Questions	BT	CO	PO
Part–A(Short Answer Questions)					
1		Define path product.	L2	CO1	PO2
2		What is a path expression?	L3	CO2	PO4
3		What is flow anomaly detection?	L2	CO3	PO5
4		Define regular expressions in path testing context.	L3	CO3	PO6, 7
5		What is logic-based testing?	L2	CO1	PO8
6		What are decision tables?	L1	CO2	PO9
7		Define KV charts.	L3	CO4	PO11
8		What are specifications in logic-based testing?	L1	CO5	PO10
9		Define path product.	L2	CO3	PO8
10		What is a path expression?	L1	CO2	PO9
Part-B(Long Answer Questions)					
11	a)	Explain path products and path expressions with examples.	L3	CO3	PO10
	b)	Describe reduction procedures and their applications.	L1	CO1	PO1
12	a)	Explain regular expressions and flow anomaly detection in detail.	L2	CO2	PO1
	b)	Discuss logic-based testing and explain decision tables with an example.	L3	CO3	PO9
13	a)	Explain path expressions, KV charts, and their role in testing.	L1	CO1	PO8
	b)	Explain path products and path expressions with examples.	L2	CO3	PO5
14	a)	Describe reduction procedures and their applications.	L3	CO4	PO9
	b)	Explain regular expressions and flow anomaly detection in detail.	L1	CO3	PO3
15	a)	Discuss logic-based testing and explain decision tables with an example.	L2	CO1	PO6
	b)	Explain path expressions, KV charts, and their role in testing.	L4	CO2	PO9
16	a)	Explain path products and path expressions with examples.	L1	CO3	PO5
	b)	Describe reduction procedures and their applications.	L1	CO1	PO3

UNIT-IV

S.No		Questions	BT	CO	PO
Part–A(Short Answer Questions)					
1		What is a state?	L1	CO2	PO2
2		Define a state graph.	L2	CO3	PO4
3		What are good and bad state graphs?	L3	CO2	PO7
4		What is state testing?	L1	CO1	PO5
5		What is a transition?	L4	CO2	PO5
6		Define testability tip.	L4	CO1	PO3
7		What is a state?	L4	CO3	PO8
8		Define a state graph.	L4	CO1	PO6
9		What are good and bad state graphs?	L1	CO2	PO3
10		What is state testing?	L1	CO3	PO9
Part–B(Long Answer Questions)					
11	a)	Explain the concept of states, state graphs, and transitions with diagrams.	L1	CO1	PO3
	b)	Discuss characteristics of good and bad state graphs.	L1	CO2	PO5
12	a)	Describe state testing and its applications.	L2	CO2	PO7
	b)	Explain the importance of testability in state-based systems	L3	CO1	PO9
13	a)	Explain the concept of states, state graphs, and transitions with diagrams.	L1	CO2	PO11
	b)	Discuss characteristics of good and bad state graphs.	L4	CO3	PO5, 7
14	a)	Describe state testing and its applications.	L1	CO1	PO4
	b)	Explain the importance of testability in state-based systems	L1	CO2	PO7
15	a)	Explain the concept of states, state graphs, and transitions with diagrams.	L1	CO2	PO1
	b)	Discuss characteristics of good and bad state graphs.	L1	CO1	PO3
16	a)	Describe state testing and its applications.	L3	CO2	PO5
	b)	Explain the importance of testability in state-based systems	L3	CO3	PO3

UNIT-V

S.No		Questions	BT	CO	PO
Part–A(Short Answer Questions)					
1		What is a graph matrix?	L4	CO1	PO4
2		Define matrix of a graph.	L4	CO2	PO6
3		What is the power of a matrix?	L4	CO3	PO7
4		Define node reduction algorithm.	L4	CO1	PO7
5		Mention tools used for testing (JMeter/Selenium/SoapUI/Katalon).	L4	CO2	PO2
6		What is a graph matrix?	L4	CO1	PO1
7		Define matrix of a graph.	L4	CO3	PO5
8		What is the power of a matrix?	L1	CO2	PO9
9		Define node reduction algorithm.	L1	CO3	PO2
10		Mention tools used for testing (JMeter/Selenium/SoapUI/Katalon).	L1	CO1	PO3
Part–B(Long Answer Questions)					
11	a)	Explain matrix representation of graphs and its applications in testing.	L2	CO2	PO8
	b)	Describe relations and power of a matrix with an example.	L1	CO3	PO9
12	a)	Explain node reduction algorithm in detail.	L4	CO1	PO6
	b)	Discuss building tools for graph-based testing and give an overview of tools like JMeter/Selenium.	L1	CO3	PO10
13	a)	Explain the motivational overview and applications of graph matrices in software testing.	L1	CO3	PO4
	b)	Explain matrix representation of graphs and its applications in testing.	L3	CO4	PO2
14	a)	Describe relations and power of a matrix with an example.	L1	CO2	PO9
	b)	Explain node reduction algorithm in detail.	L1	CO3	PO1
15	a)	Discuss building tools for graph-based testing and give an overview of tools like JMeter/Selenium.	L1	CO1	PO2
	b)	Explain the motivational overview and applications of graph matrices in software testing.	L1	CO3	PO9
16	a)	Explain matrix representation of graphs and its applications in testing.	L2	CO1	PO4
	b)	Describe relations and power of a matrix with an example.	L4	CO2	PO6