Question Paper Code: AM621PE

R22

Model Question Paper
ANURAG Engineering College
(An Autonomous Institution)
III B.Tech. II Semester Regular Examinations, June -2025
SOFTWARE TESTING METHODOLOGIES
CSE(AI&ML)

Time: 3 Hours **Max.Marks:60**

	Section – A (Short Answer type questions)			**(10 Marks)**
Answer All Questions		**Course Outcome**	**B.T Level**	**Marks**
1.	What is Testing and Debugging?	CO1	L1	1M
2.	Define the term path predicate.	CO1	L1	1M
3.	Define Domain testing.	CO2	L1	1M
4.	Define ugly domains.	CO2	L1	1M
5.	What is Path expression?	CO3	L1	1M
6.	Define logic based testing.	CO3	L1	1M
7.	Define a state graph.	CO4	L1	1M
8.	Define Transition testing.	CO4	L1	1M
9.	What is the matrix of graph?	CO5	L1	1M
10.	What is the purpose of the node reduction algorithm?	CO5	L1	1M
	Section – B (Essay Questions)			
Answer all questions, each question carries equal marks.				**(5 X10M = 50M)**
11.	a) Explain the taxonomy of bugs in software testing.	CO1	L2	5M
	b) Write about dichotomies in software testing.	CO1	L3	5M
	OR			
12.	a) Explain the concept of path predicates and achievable paths in a flow graph.	CO1	L2	5M
	b) Explain various loops with an example?	CO1	L2	5M
13.	a) Write in detail data - flow testing strategies.	CO2	L3	5M
	b) Explain various data- flow anomalies.	CO2	L2	5M
	OR			
14.	a) Explain the concept of "nice domains" and "ugly domains" in domain testing.	CO2	L2	5M
	b) Describe the concept of Transaction flow graphs.	CO2	L2	5M
15.	Describe the concept of Node reduction procedure with an example.	CO3	L2	10M
	OR			
16.	a) Illustrate the concept of decision tables.	CO3	L3	5M
	b) Write about the Regular Expressions and Flow anomaly detection?	CO3	L3	5M
17.	Describe good and bad state graph.	CO4	L2	10M
	OR			
18.	Explain about state testing.	CO4	L2	10M
19.	Explain the importance of learning about graph theory and its applications in software testing.	CO5	L2	10M

	OR			
20.	a)Write about the power of a matrix in the context of graph theory.	CO5	L3	5M
	b) Discuss node reduction algorithm.	CO5	L2	5M