SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

MCA II Year I Semester Regular & Supplementary Examinations January/February-2025
SOFTWARE TESTING

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

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	a	Analyze the control and sequence bugs by explaining how they can be caught.	CO2	L4	6M
	b	Explain achievable paths with suitable examples.	CO2	L2	6M

OR

2		Discuss the following concepts. i) Model for Testing ii) Path Predicates iii) Path Sensitizing	CO1	L2	12M

UNIT-II

3	a	Explain births and mergers in a transaction flow testing.	CO1	L2	6M
	b	Explain various loops with an example.	CO1	L2	6M

OR

4		Distinguish Control Flow and Transaction flow testing.	CO3	L4	12M

UNIT-III

5	a	Write about nice - domain.	CO2	L3	6M
	b	Give an example for nice two – dimensional domain.	CO2	L3	6M

OR

6		Discuss in detail. i) Linear domain boundaries ii) Non-linear domain boundaries iii) Complete domain boundaries iv) Incomplete domain boundaries	CO3	L2	12M

UNIT-IV

7		Write Short Notes on: i) Distributive Laws ii) Absorption Rule iii) Loops iv) Identity elements	CO3	L3	12M

OR

8	a	Analyze about Path Sums.	CO3	L4	6M
	b	Explain Path Product.	CO3	L4	6M

UNIT-V

9	a	List the principles of state testing.	CO3	L1	6M
	b	Discuss the advantages and disadvantages of state testing.	CO3	L1	6M

OR

10		Generate the design guidelines for building finite state machine into code.	CO4	L5	12M

END