Q.P. Code: 16EE237 **R16**

Reg. No: | | | | | | | | | | |

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY: PUTTUR

(AUTONOMOUS)

B.Tech IV Year II Semester Regular & Supplementary Examinations July-2021

SOFT COMPUTING TECHNIQUES

(Electrical and Electronics Engineering)

Time: 3 hours Max. Marks: 60

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

UNIT-I

1	List out the applications of neural networks and Explain.		L2	**12M**
	OR			
2	Explain types of activation function & Explain Neural dynamics.		L2	**12M**
	UNIT-II			
3	**a**	Explain how supervised learning happens in neural networks.	L2	**8M**
	b	Explain back propagation learning.	L3	**4M**
	OR			
4	Explain the weight adjustment procedure in MLFFN using back propagation algorithm.		L3	**12M**
	UNIT-III			
5	Briefly explain the working principle of Hopfield network.		L2	**12M**
	OR			
6	Distinguish Auto associative & Hetero associative memories.		L2	**12M**
	UNIT-IV			
7	**a**	Explain Cartesian product on fuzzy sets.	L2	**6M**
	b	Discuss how fuzzy relations are formed based on Cartesian product.	L3	**6M**
	OR			
8	Explain Composition operation performed on fuzzy relation with example.		L1	**12M**
	UNIT-V			
9	Explain fuzzy rule based system in fuzzy logic.		L3	**12M**
	OR			
10	Explain working Greg Viot's Fuzzy Cruise controller.		L2	**12M**

*** END ***