School of Engineering
M.TECH Communication Engineering in Satellite Communication
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem III - MCEN6011 - Soft Computing

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Compare McCulloch-Pitts and adaline models of neuron	K1 (2)
2)	Explain the term Inversion and Deletion with Example	K2 (4)
3)	Illustrate how the Deletion and Duplication is done in GA	K2 (6)
4)	Construct the basic Adaline model for Artificial neural Network.	K3 (9)
5)	Solve De Morgan's laws using Venn Diagram.	K3 (9)
6)	Evaluate the cartesian product operation for any two fuzzy sets of your choice.	K5 (10)
7)	Analyze any three advances achieved due to GA.	K4 (12)
8)	Determine the methods of inference in fuzzy logic. Explain each with proper example	K5 (15)
9)	Can Ex-OR problem be solved using perceptron model ? Justify. Assess various improvements to solve the Ex-OR problem in a single layer model.	K5 (15)
10)	Elaborate the Composition of fuzzy relations with an example	K6 (18)