

Reg.No:

--	--	--	--	--	--	--	--



SNS College of Technology, Coimbatore-35.
(An Autonomous Institution)
B.E/B.Tech- Internal Assessment -II
Academic Year 2023-2024(Odd Semester)
Fifth Semester

B

Electronics & Communication Engineering
19ECT303 – Artificial Intelligence and Machine Learning

Time: 1^{1/2} Hours

Maximum Marks: 50

Answer All Questions
PART - A (5x 2 = 10 Marks)

		CO	Blooms
1.	Illustrate the concepts of Logistic Regression	CO2	UND
2.	Compare the classification and Regression	CO2	ANA
3.	Infer the concepts of Clustering with types	CO3	UND
4.	Relate EM algorithm flow chart	CO3	REM
5.	Identify the applications of Principal Component Analysis (PCA)	CO3	APP

PART – B (2*13=26 Marks) (1*14=14 Marks)

			CO	Blooms
6.	(a)	Apply the concepts of K-Nearest Neighbor classifier algorithm with some real time examples	CO2	APP
		(or)		
	(b)	Construct the Decision Tree based methods for classification and Regression with suitable examples	CO2	APP
7.	(a)	Analyze Unsupervised Learning types and simplify the EM algorithm flow chart concepts	CO3	ANA
		(or)		
	(b)	Categorize the Hierarchical Clustering algorithm with its relevant diagrams and advantages	CO3	ANA
8.	(a)	Organize the Principal Component Analysis (PCA) with its applications	CO2	APP
		(or)		
	(b)	Make use of Probabilistic PCA for EM algorithm using derivations	CO3	APP

Abbreviations: CO – Course Outcomes; Rem- Remembering; Und – Understanding; App – Applying; Ana – Analyzing; Eva – Evaluating; Cre- Creating

Course Coordinator

Teaching Coordinator

HoD

Dean

