School of Computing Science and Engineering
B.Tech CSE
ETE - Jun 2023

Time : 3 Hours   **Marks : 50**

Sem VI - CSAI3050 - NATURAL LANGUAGE PROCESSING
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1.	Define Named Entity Recognition (NER).	K4 CO3	(2)
2.	Define Morphology.	K2 CO1	(2)
3.	Differentiate between entropy and cross entropy with the help of example.	K1 CO2	(2)
4.	What is the purpose of using morphology in NLP.	K3 CO4	(2)
5.	Define the term Bag of Words	K4 CO2	(2)
6.	What are the main challenges of NLP?	K6 CO3	(6)
7.	Build the Vector form for the "Today is off" and "Is today off".	K4 CO2	(5)
8.	What are the issues in parsing? Describe various techniques used for parsing with suitable example.	K3 CO1	(5)
9.	Explain in detail about the organization of NLP systems.	K4 CO1	(8)
10.	Define TF and IDF used in NLP? How to process textual data using TF-IDF? Create a TF-IDF model for the sentences A and B, A = "The car is driven on the road"; B = "The truck is driven on the highway"	K5 CO4	(8)
11.	The average score of a class is 90. However, a teacher believes that the average score might be lower. The scores of 6 students were randomly measured. The mean was 82 with a standard deviation of 18. With a 0.05 significance level use hypothesis testing to check if this claim is true. (The critical value from the t table is -2.015)	K5 CO3	(8)