

## Vidyavardhini's College of Engineering and Technology Department of Artificial Intelligence & Data Science

Semester	VII	Class	BE	
Course Code	CSDO7011	Academic Year	2023-24	
Course Name	Natural Language Processing			
Name of Student				

## **List of Experiments**

S.No.	Name of Experiment	DOP	DOC	Marks	Sign
Basic Experiments					
01	Study various applications of NLP and				
	Formulate the Problem Statement for Mini				
	Project based on chosen real world NLP				
	applications:				
	[Machine Translation, Text Categorization,				
	Text summarization, Chat Bot, Plagiarism,				
	Spelling & Grammar Checkers, Sentiment /				
	Opinion analysis, Question answering,				
	Personal Assistant, Tutoring Systems, etc.]				
02	Apply various text preprocessing techniques				
	for any given text: Tokenization and				
	Filtration & Script Validation				
03	Apply various other text preprocessing				
	techniques for any given text: Stop Word				
	Removal, Lemmatization / Stemming				
04	Implement N-Gram model for the given text				
	input.				
05	Study the different POS taggers and Perform				
	POS tagging on the given text.				
06	Perform chunking by analyzing the				
	importance of selecting proper features for				
	training a model and size of training.				
07	Implement Named Entity Recognizer for the				
	given text input.				



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08	Implement word sense disambiguation using		
	LSTM/GRU.		

Mini-Project Report					
09	Mini-Project				

	Project / Assignment				
10	Assignment 1 - Article on the given topic				
11	Assignment 2 - Presentation video on the given topic				
	Formative Assessn	nent			
17	Theory Quiz 1 - Introduction				
18	Theory Quiz 2 - Word Level Analysis				
19	Theory Quiz 3 - Syntax analysis				
20	Theory Quiz 4 - Semantic Analysis				
21	Theory Quiz 5 - Pragmatic & Discourse Processing				
22	Theory Quiz 6 - Applications (preferably for Indian regional languages)				
23	Lab Quiz 1 - Understanding of current NLP implementations and applications.				
24	Lab Quiz 2 - Using Word Level Analysis implementations with Tokenization, Lemmatization etc.				
25	Lab Quiz 3 - Using Syntax Analysis for Parts of Speech and Parts of Speech Tagging.				
26	Lab Quiz 4 - Using Semantic Analysis for implementation of corpus.				
27	Lab Quiz 5 - Implementation of core NLP concepts for modern applications.				
28	Lab Quiz 6 - Implementation of Mini-Project through a full fledged application.				

**Course In-charge** 

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