



R22 Regulation

Subject code:4E6HB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, November 2025

NATURAL LANGUAGE PROCESSING

(CSE(DS))

Maximum Marks: 60

Date: 21.11.2025

Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks		(10X1M=10 Marks)	Marks	CO	Bloom Tx
1.a)	Define ambiguity.		1M	1	1
b)	List the components of Word?		1M	1	2
c)	What is parsing in NLP?		1M	2	1
d)	Draw a hypergraph for "A Cat sat on the Mat".		1M	2	2
e)	Define Semantic parsing.		1M	3	2
f)	Write the important task is of co-reference resolution.		1M	3	2
g)	How does Named Entity Recognition work?		1M	4	3
h)	Write the different blocks in a Typical Named Entity Recognition model		1M	4	2
i)	How Text Classification is done?		1M	5	3
j)	Which models are currently enabling machine learning technologies that can detect different languages?		1M	5	3

Part-B

Answer All the following questions.		(5X10M=50Marks)	Marks	CO	Bloom Tx
2	Explain various applications of Natural Language Processing.		10M	1	2
	OR				
3	Elaborate on Finding the structure of Words in NLP.		10M	1	3
4	Explain the Shift Reduce Parsing with an example.		10M	2	3
	OR				
5	Explain on various representation of Syntactic Structures.		10M	2	3
6	Write the Models for Ambiguity Resolution in Parsing with an example.		10M	3	4
	OR				
7	Describe the components in semantic interpretation in Semantic Parsing.		10M	3	4
8	What are the approaches for converting linguistic insights into features?		10M	4	2
	OR				
9	Explain about semantic role labeling.		10M	4	4
10	Explain Cross-Lingual Language Models in Machine Learning.		10M	5	4
	OR				
11	Describe various methods for Language Model Adaption.		10M	5	3

