

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VII Computer Science & Engineering AI & ML : WINTER: 2025
SUBJECT: ITC-V: NATURAL LANGUAGE PROCESSING

Day : Wednesday
Date : 17/12/2025

W-23985-2025

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.
- 4) Draw neat diagrams **WHEREVER** necessary.

Q. 1 Discuss various applications of natural language processing. (10)

OR

Q. 1 Justify the importance of Grammar in NLP with the help of example. (10)

Q. 2 List and explain various techniques for text similarity used in NLP. (10)

OR

Q. 2 Write a detailed note on Regular language and FSA used in NLP with example. (10)

Q. 3 Discuss the working of speech processing architecture used in NLP. (10)

OR

Q. 3 List and explain various methods used for Decoding natural language. (10)

Q. 4 What do you mean by parsing? Explain shift-reduce parser with suitable example. (10)

OR

Q. 4 How does probabilistic parsing work in NLP? Explain in detail. (10)

Q. 5 Write a detailed note on text summarization approaches used in NLP. (10)

OR

Q. 5 Explain spell checking application of NLP in detail. (10)

Q. 6 What is Ontology? Explain the role of ontology and its applications in NLP. (10)

OR

Q. 6 What are the different ways of text processing done using NLTK? Explain at least three processings along with pseudocode. (10)
