

Roll.No.

24UDSET5B01

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

B.Sc. CS with AI - END SEMESTER EXAMINATIONS - NOVEMBER 2025
SEMESTER - V

24UDSET5B01 - Natural Language Processing

Total Duration : 1 Hrs.30 Mins.

Total Marks : 40

Section B

Answer any **TEN** questions ($10 \times 2 = 20$ Marks)

1. Identify the two main components of NLP.
2. Define the term N-gram model with an example.
3. Describe the process of stemming and its objective.
4. Sketch the phases of Natural Language Processing.
5. List any two NLP libraries and their uses.
6. Explain the purpose of Parts of Speech (POS) tagging in NLP.
7. What do you mean by Stopwords?
8. List any four types of ambiguity in NLP.
9. Give example for Machine Translation and Speech Recognition in NLP.
10. State the purpose of Morphological Analysis.
11. Interpret the term probabilistic model in NLP.
12. Illustrate the relations of WordNet in NLP.

Section C

Answer any **FOUR** questions ($4 \times 5 = 20$ Marks)

13. Explain the history and evolution of NLP in its three phases.
14. Classify and explain the techniques of Lemmatization used in NLP.
15. Interpret the working of Hidden Markov Model (HMM) with an example.
16. Illustrate the steps in building an NLP pipeline with suitable examples.
17. Assess the importance of Pragmatic Analysis in Natural Language Understanding.
18. Differentiate between Top-down and Bottom-up Parsing techniques.
