

Code No.: AI513PE

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**CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS**

**III-B.TECH-I-Semester End Examinations (Regular) - January- 2024
NATURAL LANGUAGE PROCESSING
(CSM)**

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks.

PART-A

(20 Marks)

1. a) Briefly explain tokens. [2M]
- b) Demonstrate approaches to find structure of document. [2M]
- c) Explain syntax analysis using syntax tree. [2M]
- d) Discuss word segmentation. [2M]
- e) What is semantic parsing in natural language processing? [2M]
- f) Explain system paradigms. [2M]
- g) What is Word Sense Disambiguation? [2M]
- h) Explain the systems in meaning representation. [2M]
- i) Discuss Bayesian Parameter Estimation. [2M]
- j) Explain Multilingual Language Modeling. [2M]

PART-B

(50 Marks)

2. Discuss the Issues and challenges in finding structure of words. [10M]
- OR**
3. Compare sentence boundary and topic boundary detection. [10M]
4. Compare the generative and discriminative models in ambiguity resolution for parsing. [10M]
- OR**
5. Discuss the various parsing algorithms in syntax parsing. [10M]
6. Summarize semantic interpretation. [10M]
- OR**
7. Discuss the components of word sense system. [10M]
8. Summarize meaning representation systems. [10M]
- OR**
9. Discuss the component of predicate argument structure. [10M]
10. List and explain any five types of language models. [10M]
- OR**
11. Explain Language Model Adaptation. [10M]
