CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–I–Semester End Examinations (Supply) – April – 2025
NATURAL LANGUAGE PROCESSING
(CSD, AI&DS)

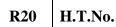[Time: 3 Hours]   [Max. Marks: 70]

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 and may have a, b, c as sub questions.

PART-A   (20 Marks)

1. a) Briefly explain tokens.   [2M]
   b) Summarize sentence boundary detection.   [2M]
   c) Explain syntax analysis using dependency graphs.   [2M]
   d) Discuss syntax parsing using Hypergraphs.   [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 system in Predicate-Argument Structure.   [2M]
   i) Discuss n- Gram models.   [2M]
   j) Compare Spoken versus Written Languages.   [2M]

PART-B   (50 Marks)

2. List and explain the issues and challenges in morphological model.   [10M]
                                    OR
3. Describe generative sequence and discriminative local classification methods.   [10M]

4. Compare the models for ambiguity resolution in parsing.   [10M]
                                    OR
5. Discuss the various Multilingual issues in syntax parsing.   [10M]

6. Summarize semantic interpretation.   [10M]
                                    OR
7. Discuss the components of word sense.   [10M]

8. Summarize predicate argument structure.   [10M]
                                    OR
9. Discuss the components of meaning representation systems.   [10M]

10. List and explain any five types of language models .   [10M]
                                    OR
11. Compare Multilingual and crosslingual language modeling.   [10M]

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