CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–I–Semester End Examinations (Supply) - December- 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 lexemes.   [2M]
   b) Summarize topic boundary detection.   [2M]
   c) Explain Tokenization.   [2M]
   d) What is Syntax parsing in natural language parsing?   [2M]
   e) Describe system paradigms in semantic parsing .   [2M]
   f) Explain word sense in semantic interpretation.   [2M]
   g) Explain the systems in meaning representation.   [2M]
   h) What is Word Sense Disambiguation?   [2M]
   i) Discuss Discriminative Language Model.   [2M]
   j) Explain Multilingual Language Modeling.   [2M]

PART-B   (50 Marks)

2. Explain the different morphological models.   [10M]
                                    OR
3. Describe discriminative local and discriminative sequence classification method.   [10M]

4. Discuss the treebanks approach to syntax analysis.   [10M]
                                    OR
5. Discuss the various representations of Syntactic Structure.   [10M]

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

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

10. Explain various parameter estimation models.   [10M]
                                    OR
11. Summarize the various language specific modelling problems.   [10M]
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