Code No.: CY862PE | R20 | H.T.No. | | | 8 | R | | | | |

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–II–Semester End Examinations (Regular) – April - 2025
NATURAL LANGUAGE PROCESSING
(CSC)

[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) Define Morphological Analysis.   [2M]
   b) What is tokenization in the context of morphological analysis?   [2M]
   c) What is a syntactic structure in NLP?   [2M]
   d) Define parsing in NLP.   [2M]
   e) What is a semantic paradigm in NLP?   [2M]
   f) Define semantic interpretation in the context of NLP.   [2M]
   g) What is a meaning representation system?   [2M]
   h) What is an argument in a predicate-argument structure?   [2M]
   i) What is discourse processing in NLP?   [2M]
   j) Define language adaptation in the context of NLP.   [2M]

PART-B   (50 Marks)

2. Explain the challenges in analyzing word structure in natural language processing. [10M]
    How do morphological models address these challenges?

OR

3. Explain different types of morphological models used in NLP and compare their [10M]
    performances.

4. What is the role of data-driven approaches in building syntactic parsers? How do they [10M]
    improve performance?

OR

5.   Explain in detail about Models for Ambiguity Resolution in Parsing.   [10M]

6. Describe the different system paradigms used for semantic interpretation in NLP. [10M]

OR

7. Compare and contrast various approaches to semantic parsing. Discuss their strengths [10M]
    and weaknesses.

8. Describe how different NLP systems represent predicate-argument structures.   [10M]

OR

9. Explain the importance of meaning representation systems and how they are used in [10M]
    NLP applications.

10. Explain about different Types of Language Models.   [10M]

OR

11. What is reference resolution in discourse? Explain the challenges and methods for [10M]
    resolving reference.

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