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**Roll No. ....**

**TCS-823**

**B. TECH. (CSE) (EIGHTH SEMESTER)**

**MID SEMESTER EXAMINATION,**

**April/May, 2022**

**NATURAL LANGUAGE PROCESSING**

**Time : 1½ Hours**

**Maximum Marks : 50**

**Note :** (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each question carries 10 marks.

1. (a) Explain *five* potential applications of NLP.  
Establish technical flow of machine translation. 10 Marks (CO1)

**OR**

- (b) What are different challenges to achieve Natural language understanding ? Provide proper example for the same.

10 Marks (CO1)

**P. T. O.**

(2)

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2. (a) Explain the concept of POS Tags and Named Entity Recognition.

10 Marks (CO1)

OR

- (b) What is the process of text summarization using SpaCy and NLTK ? 10 Marks (CO1)

3. (a) What is Tokenization and Stemming ?  
Write pseudo code for the same.

10 Marks (CO1)

OR

- (b) How to deal with ambiguity in Natural Language Processing ? 10 Marks (CO1)

4. (a) Explain difference between top down and bottom up parser with example. Explain recursive descent parser with example.

10 Marks (CO2)

OR

- (b) Explain the process of information extraction. Write difference between LL and LR parser. 10 Marks (CO2)

(3)

5. (a) Explain about Linguistic Analysis and Language Properties. Give an example.

10 Marks (CO2)

OR

- (b) What is the difference between Syntactic and Semantic Analysis Tool ? What is data sourcing for NLP ? 10 Marks (CO2)

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