Roll No. ....

TCS–823

B. TECH. (CSE) (EIGHTH SEMESTER)
MID SEMESTER EXAMINATION, 2021
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) What is Finite State Transducer ? Take the Morphological base of any language and explain the Finite State Transducer on it.

10 Marks (CO1, CO2)

OR

(b) Explain the Early Algorithm and also explain the problems in basic top down parsing.   10 Marks (CO1, CO2)

2. (a) Explain porter stemmer. How does it help in NLP ?   10 Marks (CO1, CO2)

OR

(b) What is Part of Speech (PoS) Tagging ? Explain Rule Base PoS tagging, Stochastic PoS tagging and Transformation based tagging in detail.   10 Marks (CO1, CO2)

3. (a) What is Tag sets for English and explain the tagging (rule based) ?

10 Marks (CO1, CO2)

OR

(b) Explain Parsing in the context of NLP.

10 Marks (CO1, CO2)

4. (a) What is Regular Expressions ? What is Deterministic and Non-deterministic Finite state automata ?   10 Marks (CO1, CO2)

OR

(b) What do you mean by language accepted by machine ? Explain the Chomsky hierarchy.   10 Marks (CO1, CO2)

5. (a) What is the problem with basic top-down parser ? Explain in detail. 10 Marks (CO2)

OR

(b) Explain the Finite State parsing methods in NLP.   10 Marks (CO2)