Date: 07.02.2018

Max. Marks: 20

Part-A   3*2=6

1Q. Discuss the applications of Natural language processing.   [2M]

2Q. Classify the sentences a) syntactically correct or not b) semantically correct or not
   c) pragmatically correct or not   [2M]
   i) The car is too cold   ii) The heater are on   iii) The tires are brand new.
   iv) Too many windows eat the stew.

3Q. Differentiate Top-down and Bottom-up parsing with an example.   [2M]

Part-B (Answer any two)   2*7=14

4Q a) Explain with diagram organization of a natural language understanding system.   [4M]
   b) Describe all the levels of language analysis in natural language processing system.   [3M]

5Q a) Draw a Phrase Structure Tree representing parse of the following sentence. Make a list of the phrase structure rules that you are assuming. John and Mary bought a refrigerator with three doors. [4M]
   b) Describe Semantics for Knowledge representation.   [3M]

6Q a) Describe Statistical modelling and classification of FSM.   [4M]
   b) Explain how Machine Translation is an application of NL.   [3M]

Chaitanya Bharathi Institute of Technology
Department of Information Technology
B.E. I.T. 3/4-II- Semester, II-Mid Examinations, April, 2018
Sub: NATURAL LANGUAGE PROCESSING

Date: 06.04.2018   Time: 2:00pm-3:00pm   Max. Marks: 20

Part-A   3*2=6

1Q. Explain Grammars and Sentence structures of Natural Language Processing.   [2M]

2Q. How Parsing will work like search procedure. Explain with an example.   [2M]

3Q. Draw Markov chain model.   [2M]

Part-B (Answer any two)   2*7=14

4Q. Describe Top-Down Chart Parsing with an Example sentence and Algorithm. [7M]

5Q. a) Explain Probabilistic context-free grammars with example.   [4M]

   b) Explain about prepositional phrases and verb phrases.   [3M]

6Q. a) Describe Part-of-speech tagging of language.   [4M]

   b) what is best first algorithm. Explain with example.   [3M]

Paper set by: Sarada B