

FACULTY OF ENGINEERING
B.E. 4/4 (CSE) II Semester (Main) Examination, May/June 2012
NATURAL LANGUAGE PROCESSING (Elective – III)

Time: 3 Hours]

[Max. Marks : 75

Note : Answer all questions from Part A. Answer any five questions from Part B.

PART – A

25

1. Define Lexicon. What is its significance in NLP ?
2. What are the main difference between knowledge and language ?
3. What are the features of a good grammar ?
4. What is simple noun phrase ?
5. What is an ATN ?
6. What is SENDR action in ATN system ?
7. Distinguish between embedded and non-embedded statement.
8. What are the main issues in semantic interpretation ?
9. What is morphological analysis ?
10. What is scoping phenomena ?

PART – B

(5×10=50 Marks)

11. a) What is natural language understanding ? Explain with an example.
b) What is a phrase ? Explain prepositional phrase and complements with example.
12. Explain top-down and bottom-up parse of the sentence – “The old man cried”.



13. Write an ATN parser that recognises verb phrases involving auxiliary verbs.
 14. Explain the following :
 - a) Shift reduce parsers.
 - b) Wh-questions and hold mechanism.
 15. a) What is semantic grammar ?
b) Explain a simple interleaved syntactic and semantic analyzer.
 16. Explain the different types of logical forms. Discuss the features of logical forms.
 17. Discuss rule-by-rule semantic interpretation based on lambda-calculus.
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