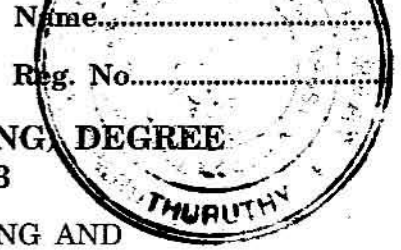


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**SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, NOVEMBER 2013**

**IT 09 702—NATURAL LANGUAGE PROCESSING AND
KNOWLEDGE BASED SYSTEMS**

Time : Three Hours

Maximum : 70 Marks

Part A

Answer all questions.

1. Mention any 2 issues in NLP.
2. What is Bottom up parsing ? Give an example.
3. List the main components of knowledge.
4. How will you represent knowledge using semantic networks ?
5. What is brute force approach ?

(5 × 2 = 10 marks)

Part B

Answer any four questions.

6. Explain the types of NLP Systems.
7. What are deterministic parsers ? Illustrate with an example.
8. Draw the architecture of knowledge based systems and explain the components.
9. Write a note on hierarchical planning.
10. Explain matching in semantic networks with an example.
11. Write the algorithm for resolution in predicate logic.

(4 × 5 = 20 marks)

Part C

Answer all questions.

12. Explain the flow of information of natural language understanding systems.

Or

13. How will you represent sentence structure ? Illustrate with an example.

Turn over

14. Explain top down parsing strategy in detail.

Or

15. Write the significance of shift reduce parsers.

16. Write a script for "trip to Ooty".

Or

17. Write the unification algorithm. Illustrate with an example.

18. Elaborate on least commitment principle and constraint propagation

Or

19. Compare and contrast Classification and Black board models.

(4 × 10 = 40 marks)