

Total No. of Questions : 6]

SEAT No. :

P172

[Total No. of Pages : 2

OCT/BE/Insem.-101

B.E. (Computer Engineering)

MULTIDISCIPLINARY NATURAL LANGUAGE PROCESSING

(2012 Pattern) (Elective - II) (Semester - I)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Attempt Q1 or Q2, Q3 or Q4, and Q5 or Q6.
- 2) Figures to the right indicate full marks.
- 3) Assume suitable data, if necessary.

**Q1)** a) What are the various models of metaphors. Explain any one in detail. [5]

b) Explain Lexical knowledge networks in detail. [5]

OR

**Q2)** a) Discuss Scope ambiguity and ambiguity resolution in detail. [5]

b) Compare Hybrid of Rule Based and Probabilistic Parsing giving example. [5]

**Q3)** a) What is the use of Named Entities in recognition and classification of text in Natural Language Processing. [5]

b) Explain the concept of forward and Backward probability with example. [5]

OR

**Q4)** a) Explain the steps of EM algorithm in Natural Language Processing. [5]

b) With suitable example, explain the Maximum Entropy framework. [5]

P.T.O.

**Q5) a)** Discuss suitable model for sequence labeling in NLP. **[5]**

**b)** Compare Unsupervised NLP with Supervised NLP with example. **[5]**

OR

**Q6) a)** What is Finite state Morphological Parsing? Discuss with Example. **[5]**

**b)** Explain in short the Viterbi algorithm for estimating the state sequence of FSM process. **[5]**

