P122

Oct.-16/B.E./Insem.-181

B.E. (Computer Engineering)

MULTIDISCIPLINARY NATURAL LANGUAGE PROCESSING

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

Time : 1 Hour]   *[Max. Marks : 30*

Instructions to the candidates:

1) *Answer Q1 or Q2, Q3 or Q4, Q5 or Q6.*

2) *Figures to the right side indicate full marks.*

3) *Assume Suitable data if necessary.*

Q1) a) What is Parsing? Explain various parsing algorithms. **[5]**

     b) Give the significance of Hybrid Parsing using probabilistic models.**[5]**

OR

Q2) a) What is meant by Scope Ambiguity? Explain how statistical modeling is done for a ambiguity resolution. **[5]**

     b) What is Metaphors? Explain various models of metaphors. **[5]**

Q3) a) With suitable example, explain the Maximum Entropy framework.**[5]**

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

OR

Q4) a) Explain in brief, the need of discourse processing. Also explain the role of temporal segmentation in discourse processing. **[5]**

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

P.T.O.

Q5) a) What do you mean by Unsupervised NLP? Compare Unsupervised NLP with Supervised NLP. **[5]**

b) Give the general form of HMM model and also explain Ergodic model of HMM. **[5]**

OR

Q6) a) Explain in short the Viterbi algorithm for estimating the state sequence of FSM process. **[5]**

b) Give the steps of Graphical models for sequence labeling in NLP. **[5]**

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