

Total No. of Questions : 4]

SEAT No. :

PA-10207

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[6010]-80

**B.E. (Information Technology) (In Sem.)**

**NATURAL LANGUAGE PROCESSING**

**(2019 Pattern) (Semester - VIII) (414451 - C) (Elective - V)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates :*

- 1) Answer Q.1 or Q.2, Q.3 or Q.4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data, if necessary.

- Q1)** a) What is language modeling? What are the techniques used for language modeling? [5]  
b) Discuss challenges in processing Natural language. [5]  
c) How grammar rules are used in processing Indian languages? [5]

OR

- Q2)** a) State and explain application of natural language processing. [5]  
b) Define semantic and syntactic level of understanding in natural language processing. [5]  
c) What is Statistical Language Model? Explain in detail with respect to natural language processing. [5]

- Q3)** a) How errors in spelling are detected and processed? Explain with example. [7]  
b) Explain parsing, importance of parsing in NLP? Explain morphological parsing with example? [8]

OR

- Q4)** a) How tagging is done in part-of-Speech? [5]  
b) Explain parsing in NLP? List and explain different parsing techniques used in the processing of natural language. [8]  
c) What is syntactic analysis? [2]

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