## [6270]-93

## B.E. (Information Technology) (Insem)
## NATURAL LANGUAGE PROCESSING
## (2019 Pattern) (Semester - VIII) (414451C) (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 indicate full marks.*
4) *Assume suitable data, if necessary.*

*Q1)* a) Give significance of grammar in natural language processing with example.

                                                          **[5]**

     b) Explain the significance of NLP in information retrieval?     **[6]**

     c) Explain language modeling in NLP.     **[4]**

### OR

*Q2)* a) Prove how language modeling plays vital role of in NLP.     **[5]**

     b) Explain the significance of Statistical Language Model in with suitable example.     **[6]**

     c) List out any 4 challenges in NLP.     **[4]**

*Q3)* a) Compare Word level analysis and syntactic analysis.     **[6]**

     b) Write short note on Probabilistic Parsing.     **[4]**

     c) What are Words and Word Classes?     **[5]**

### OR

*P.T.O.*

*Q4)* a) Explain Part-of-Speech Tagging and its use in NLP? **[6]**

b) What are challenges in syntactic analysis for Indian Languages? **[4]**

c) How finite state automata is used in word level analysis? **[5]**

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