

Total No. of Questions : 4]

SEAT No. :

PA-10124

[6009]-428

[Total No. of Pages : 1

T.E. (Artificial Intelligence and Data Science) (Insem)
NATURAL LANGUAGE PROCESSING
(2019 Pattern) (Semester - II) (317532 (B)) (Elective - II) (Theory)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Solve questions Q.1 or Q.2 and 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) Explain Generic Natural Language Processing System in detail. [5]
b) List and explain the challenges of Natural Language Processing. [5]
c) Describe knowledge-based approaches used in NLP. [5]

OR

- Q2)** a) List and explain different Levels of Natural Language Processing. [5]
b) Explain the applications of Natural Language Processing. [5]
c) Describe rule-based approaches used in NLP. [5]

- Q3)** a) What is Morphology? Which are the types of Morphology? [5]
b) Explain Morphological Parsing with Finite-State Transducers. [5]
c) Discuss the term Word and Sentence Tokenization. [5]

OR

- Q4)** a) Describe N-gram for language model using suitable example. [5]
b) Explain Orthographic Rules and Finite-State Transducers. [5]
c) Explain Derivational & inflectional morphology in detail. [5]

