

SPPU-BE-COMP-CONTENT – KSKA Git

Total No. of Questions : 4]

SEAT No. :

PD267

[Total No. of Pages : 1

[64111]-42

B.E. (Computer Engineering) (Insem)
NATURAL LANGUAGE PROCESSING
(2019 Pattern) (Semester - VIII) (410252A) (Elective - V)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Answer Q1 or Q2, Q3 or Q4.*
- 2) *Figures to the right indicate full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Assume suitable data, if necessary.*

Q1) a) Describe different stages of Natural Language Processing. [7]

b) Explain in detail text processing in Natural Language Processing. [8]

OR

Q2) a) Differentiate between programming languages and natural languages. [4]

b) Discuss the challenges of Natural Language Processing. [7]

c) Differentiate between stemming and lemmatization. [4]

Q3) a) What is morphology? Explain Derivational and Inflectional morphology in detail with suitable examples. [7]

b) Construct the possible parse trees for the sentence “astronomers saw the stars with ears” and comment on the ambiguity associated with it. (Assume suitable grammar). [8]

OR

Q4) a) Illustrate the working of FST for morphological analysis with an example. [7]

b) Explain with suitable examples following relationship between word meanings : [8]

- i) Homonymy
- ii) Polysemy
- iii) Synonymy
- iv) Hyponymy

