

Total No. of Questions : 8]

SEAT No. :

P624

[6004]-577

[Total No. of Pages : 2

B.E.

INFORMATION TECHNOLOGY

Natural Language Processing

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

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 and Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

Q1) a) What is Lexical Semantic? What are the main approaches to meaning representative Compare and contrast them? [8]

b) Explain Word Sense Disambiguation. How it is handled in NLP? [10]

OR

Q2) a) Define cohesion and explain its role in discourse processing. [6]

b) Write a short note on : Relation of class model and state model. [6]

c) Explain Sematic meaning and its representation with respect to Indian languages. [6]

Q3) a) How Dependency path kernal is used in relation extraction. [8]

b) What is role of annotate knowledge in text reports. [9]

OR

Q4) a) How natural language processing is used in web search? Explain with an example. [7]

b) Write a note on : [10]

i) Frame semantics.

ii) Semantic role labeling.

Q5) a) Write algorithmic steps in detail for document separation. [8]

b) Write a note on : [9]

i) Domain knowledge.

ii) Domain Concepts.

iii) Knowledge Roles.

OR

P.T.O.

- Q6)** a) Give a suitable example for “Document Separation as a sequence Mapping problem”. [8]
b) What is Role Data Preparation in Automatic Document Separation. [9]
- Q7)** a) Explain in detail working of iSTART. [8]
b) Write a note on Lexical resources : [10]
i) Stemmers.
ii) Part-of-Speech Tagger.
- OR
- Q8)** a) Explain in detail “Evaluation of the IR System”. [6]
b) Discuss in detail design Features of any Information Retrieval systems. [6]
c) How Classical Information Retrieval Models works? [6]

