

Total No. of Questions : 8]

SEAT No. :

PD4671

[Total No. of Pages : 2

[6404]-177

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, Q.7 or Q.8.*
- 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) Explain WSD in NLP. **[6]**
b) Explain the difference of discourse structure from other reference mechanisms. **[6]**
c) Write a short note on Semantic Analysis. **[6]**

OR

- Q2)** a) What are the different types of ambiguity? Provide an example of each. **[6]**
b) How do anaphora and cataphora affect cohesion in discourse processing? **[6]**
c) Explain the concept of compositional meaning and its role in meaning representation. **[6]**

- Q3)** a) Explain with example two major approaches for relation extraction. **[6]**
b) Describe the patterns used to extract relationship between two entity with a given sentence. **[6]**
c) Explain the journey of text processing from word Sequences to dependency Paths. **[6]**

OR

- Q4)** a) Write short note on the following : **[10]**
i) In fact System Overview
ii) Global Security.org
b) Write a note on “frame Semantics & Semantic role labelling”. **[8]**

P.T.O.

Q5) a) How pages are classified for trainable document separation. **[9]**

b) What is probabilistic model? Give examples of probabilistic models and explain any one in detail. **[9]**

OR

Q6) a) What is sequence mapping problem ? How it affects the document separation? **[9]**

b) Write a note on various approaches to analysing texts. **[9]**

Q7) a) Write a short note on **[9]**

i) Word Net

ii) Frame Net

iii) Stemmers

b) Explain non - classical Information Retrieval Model. **[7]**

OR

Q8) a) With a suitable example explain cluster based IR modeling. **[9]**

b) Explain design feature of IR with a neat diagram. **[7]**

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