

M.Sc. - II (Computer Science) (NEP Pattern) - Semester-III
03MSCCS04.1 - Elective-I Paper-V : Natural Language Processing

P. Pages : 1

Time : Two Hours



GUG/W/24/15970

Max. Marks : 40

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- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagram and use supporting data whenever necessary.
 3. Avoid vague answer and write specific answers related to question.

Either

1. a) What is natural language processing? Explain. 4
- b) Explain the impact of NLP on society in detail. 4

OR

- c) List and explain the basic application of natural language processing. 4
- d) Explain decision making with suitable example. 4

Either

2. a) Write a detail note on conditional frequency distribution. 4
- b) Explain Kneser-Ney smoothing in detail. 4

OR

- c) Explain in detail of generalization and zeros. 4
- d) Explain Naïve Bayes classifiers in details. 4

Either

3. a) Explain gradient descent regularization in detail. 4
- b) What is sigmoid ? Explain in detail. 4

OR

- c) What is pointwise mutual information? Explain. 4
- d) Explain PPMI vector models in detail. 4

Either

4. a) Describe sentence tokenization in detail. 4
- b) What is corpus analysis? Explain. 4

OR

- c) List and explain the challenges for word tokenization. 4
- d) Explain various different file formats for corpora. 4

5. Solve all the questions.
- a) Give the importance of togetherness. 2
- b) What is stupid backoff? Explain. 2
- c) Write a brief note on Lexical semantics. 2
- d) Define the term sampling in detail. 2
