## National Forensic Sciences University School of Cyber Security and Digital Forensics

Course Name: M.Tech AIDS (Batch: 2024-26) Semester - II Exam: Mid-Sem (Mar - 2025)

Subject Code: CTMTAIDS SII P3 Time: 03:30 PM to 05:00 PM

Subject Name: Natural Language Processing Date: 19-03-2025

## Q-1 Answer the following Questions. (Attempt any five)

50 marks

- What is regular expression? Explain various metacharacters. Explain any two functions of re module.
- 2. List various techniques for detecting and correcting spelling errors and explain minimum edit distance technique in detail with example.
- 3. What is PoS tagging? Explain different algorithms for PoS tagging in detail.
- 4. What is Chomsky Normal Form? What are the rules for CFG to CNF conversion? Explain CKY algorithm.
- 5. Explain various parsing techniques for context free grammar in detail.
- 6. Explain first order logic in detail.
- 7. Explain description logic in detail.

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