

Natural language processing

Assignment No:-1

- ① Define NLP. What makes NLP difficult?
- ② Explain Transformation Grammar with example?
- ③ Explain LFG?
- ④ Write a note on the following with example.
 - ① \bar{x} -theory
 - ② Theta-theory
- ⑤ Write the C-structure & F-structure for the following sentence "She saw stars"
consider the CFG rules
$$\begin{aligned} S &\rightarrow NP VP \\ VP &\rightarrow V \{NP\} \{NP\} PP^* \{S'\} \\ PP &\rightarrow P NP \\ NP &\rightarrow Det N \{PP\} \\ S' &\rightarrow Comp S \end{aligned}$$

- ⑥ What is morphological parsing? Explain 2-level morphological model with an example.
- ⑦ Comment on validity of the following statements
- ① Rule-based taggers & Non-deterministic
 - ② Stochastic taggers are language dependent
- ⑧ Explain Levenshtein's minimum edit distance algorithm?
- ⑨ Compute minimum edit distance b/w 'tutor' & 'lemor'.
- ⑩ Explain TBL tagging algorithm?
- ⑪ Write a short note on Constituency
- ⑫ Explain Content-free grammar with example.