

**QP CODE: 25022670** 



Reg No	:	
--------	---	--

Name : .....

# M.Sc DEGREE (CSS) SPECIAL REAPPEARANCE EXAMINATION, APRIL 2025

## **Third Semester**

M.Sc ARTIFICIAL INTELLIGENCE

## **ELECTIVE - AI810302 - NATURAL LANGUAGE PROCESSING (NLP)**

2020 ADMISSION ONWARDS

89EECC78

Time: 3 Hours Weightage: 30

#### Part A (Short Answer Questions)

Answer any eight questions.

Weight 1 each.

- 1. Write a pattern which places the first word of an English sentence in a register. Deal with punctuation.
- 2. Write about human morphological parsing.
- 3. What is syntax? What are the three new ideas related to syntax and grammar?
- 4. Explain grammar equivalence and normal form.
- 5. Give examples of subsumption.
- 6. What are the problems with PCFG?
- 7. Discuss the meaning representation related to categories.
- 8. What is meant by currying?
- 9. What is meant by discourse? What is the problem of reference and related terms?
- 10. What is meant by coherence?

(8×1=8 weightage)

### Part B (Short Essay/Problems)

Answer any **six** questions.

Weight 2 each.

- 11. Explain the working of an FSA that recognizes strings.
- 12. What are the Closed Class word types in English? Explain each of them.
- 13. With proper examples explain the situation in which verbs appear in different forms.
- 14. Explain Top Down Parsing.
- 15. Explain briefly DAG representation of feature structures.



Page 1/2 Turn Over



- 16. Discuss CFG specification of the syntax of FOPL.
- 17. Explain fully unified FD.
- 18. How RST relations are graphed? Use the sentences –I love to collect classic automobiles. My favorite car is my 2020 Toyota.

(6×2=12 weightage)

## Part C (Essay Type Questions)

Answer any **two** questions.

Weight **5** each.

- 19. Write an essay on simple N-grams.
- 20. Describe the working of Brill's TBL tagger.
- 21. Explain information extraction.
- 22. How to map the discourse plans to the input of surface realizers.

(2×5=10 weightage)

