

QP CODE: 25022659



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

## **Third Semester**

M.Sc COMPUTER SCIENCE (Data Analytics)

#### CORE - CA030302 - EXPLORATORY DATA ANALYTICS FOR NLP

2019 ADMISSION ONWARDS

5AADA7E1

Time: 3 Hours Weightage: 30

### Part A (Short Answer Questions)

Answer any eight questions.

Weight 1 each.

- 1. What do you mean by relational perspectives in natural language processing?
- 2. What is a dispersion plot?
- 3. How is strings are used for NLP?
- 4. List some of the reasons for using exploratory data analysis.
- 5. Create a two dimensional array myArray=[[2, 3, 4, 5], [2, 4, 6, 8], [1, 3, 5, 7]]. Write the code snippet for the following:
  - a)To print the number of myArray's dimension.
  - b)To print the number of myArray's elements.
- 6. What are the advantages of data transformation?
- 7. Explain Left merge and right merge.
- 8. Explain Drill down and roll up operation.
- 9. Define p-hacking.
- 10. What are the two categories of supervised learning algorithms?

(8×1=8 weightage)

#### Part B (Short Essay/Problems)

Answer any **six** questions.

Weight 2 each.

- 11. What are the different phases of natural language processing?
- 12. Explain NLP, NLU, and NLG in detail.
- 13. Describe the significance of EDA.



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- 14. Briefly explain different types of measurement scales.
- 15. List and explain types of outliers with help of suitable diagrams.
- 16. Why data transformation is important and explains the methods.
- 17. Briefly explain multiple linear regression model.
- 18. What are the different stages in data preprocessing?

(6×2=12 weightage)

# Part C (Essay Type Questions)

Answer any **two** questions.

Weight **5** each.

- 19. Explain the computing with language in python.
- 20. Discuss in detail about the different visual aids for EDA.
- 21. Explain missing data handling in NLP, give the example.
- 22. Explain in detail about Regression Analysis.

(2×5=10 weightage)

