



<b>QP CODE: 25047686</b>	25047686	<b>Reg No</b>	:	.....
		<b>Name</b>	:	.....

--

**M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025**

**Third Semester**

M Sc Computer Science (Data Analytics)

**Core Course - CA030302 - EXPLORATORY DATA ANALYTICS FOR NLP**

2020 ADMISSION ONWARDS

88362133

Time: 3 Hours	Weightage: 30
---------------	---------------

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight 1 each.*

--

1. What do you mean by distributional perspectives in natural language processing?
2. What is NLTK?
3. Explain the terms a)Stemming b)Lemmatization c)POS tagging
4. List the four open source tools available for EDA.
5. Create a two dimensional array my2DArray=[[1, 2, 3, 4], [2, 4, 9, 16], [4, 8, 18, 32]] and print it.
6. Create a dataframe that records the rainfall, humidity, and wind conditions of five different cities A,B,C,D.Pivot the columns into rows to produces a series.
7. Discuss renaming axes indexes?
8. Explain the benefits of data transformation in detail.
9. Define p-value and level of significance in hypothesis testing.
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. Write short notes on the challenges in natural language processing.
12. Explain any five statistical methods used in NLP.
13. Briefly explain different types of measurement scales.





14.	Briefly explain about Lollipop charts.
15.	Explain the Data cube process (OLAP) approach and Attribute-oriented induction (AOI) approach.
16.	List and explain types of outliers with help of suitable diagrams.
17.	Why is data dredging bad?
18.	Briefly explain the different types of accuracies computed using a confusion matrix in model evaluation.
(6×2=12 weightage)	

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19.	Demonstrate the making decisions and taking control in language processing.
20.	Explain the following a)Creating array using built-in NumPy functions b)The three rules that should be followed while working with NumPy arrays.
21.	Explain data transformation in detail with help of example.
22.	Discuss in detail about the different types of machine learning algorithms
(2×5=10 weightage)	

