



QP CODE: 25047692



25047692

Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc Artificial Intelligence

Core Course - AI010302 - INTRODUCTION TO DATA ANALYTICS

2020 ADMISSION ONWARDS

1AA9BAA6

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Explain about the meaning of parameters in data analysis.
2. What is the motivation behind Data Mining ?
3. Discuss about Cook's distance.
4. Explain about Lasso.
5. What are the main issues in classification?
6. What are the advantages of the KNN Algorithm?
7. Compare between supervised and unsupervised learning.
8. How to implement EFA ?
9. Explain about Decision tree.
10. Discuss about ensembles method.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Explain about the different categories of data.
12. What are the different methods available for cleaning the collected data?
13. Explain Weighted least squares for the MLR model.
14. Explain about feature selection method in regression.
15. Explain about Linear discriminant analysis.





16. Explain about regression tree.
17. Discuss about PCA with an example.
18. Explain about decision tree with algorithm.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain about data science process in detail.
20. Explain Simple Linear Model in detail.
21. a) Compare linear regression and Logistic regression b) Explain about binary classification with logistic regression.
22. Give a detailed description about the following terms a) Learning methods b) Principal Component Analysis c) Exploratory Factor Analysis.

(2×5=10 weightage)

