

Code No: 155AT

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, July/August - 2023

DATA ANALYTICS

(Computer Science and Engineering - Networks)

Time: 3 Hours

Max. Marks: 75

**Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART – A****(25 Marks)**

- 1.a) Define outliers. [2]
- b) Explain how data is extracted from signals? [3]
- c) What is the need for business modeling? [2]
- d) Discuss about missing imputations. [3]
- e) Define sigmoid function. [2]
- f) What is the meaning of epsilon ( $\epsilon$ ) in regression equation? [3]
- g) Define the concept of pruning. [2]
- h) Discuss briefly about Arima. [3]
- i) Define data visualization. [2]
- j) What is the role of Tableau in Data Visualization? [3]

**PART – B****(50 Marks)**

2. Design Data Architecture and manage the Data for analysis. [10]  
**OR**
3. Illustrate in detail about the concept of managing the data for analysis. [10]
4. Demonstrate the types of regression with the help of a neat diagram. [10]  
**OR**
5. Give examples to explain the places where analytics is used. [10]
6. With the help of an example, explain the concept of linear regression. [10]  
**OR**
7. Describe in detail about Logistic Regression and its components. [10]
8. Compare and contrast between regression and segmentation. [10]  
**OR**
9. Give an example to show the process of feature extraction from generated model. [10]
10. Explain the geometric projection visualization technique with the help of an example. [10]  
**OR**
11. Demonstrate the example to explain the concept of Hierarchical Visualization Techniques. [10]