# Dr VS Krishna Govt Degree College(A)

## III B.Sc., V SEMESTER – END EXAMINATIONS, 2022 – 2023

## ComputerScienceREVISEDSYLLABUSw.e.f.2022-23

## (DATA SCIENCE)

Time: 3 Hours MODEL PAPER -6C Max. Marks:

75

#### SECTION - A

### Answer any FIVE of the following questions: $[5 \times 5 = 25 \text{ Marks}]$

- 1. What is Data Science?
- 2. How to create Dictionaries using Python
- 3. What is Bayesian Theorem
- 4. Explain about the Normal Distribution
- 5. How to handle data in Data Science
- 6. What is the Curse of Dimensionality
- 7. What are the assumptions of the Least Squares Model
- **8.** Explain the concept of Backpropagation

### **SECTION - B**

### **Answer the following questions:**

[5 X 10 = 50 Marks]

9. A) How to Visualizing Data using Python.

OR

- b) Write a program to create vectors using Python.
- 10. A) Write the procedure to estimate the Gradient.

OR

- B) Explain the Statistical Hypothesis Testing using an example.
- 11. A) What Is Machine Learning? Explain the concept of Over fitting and under fitting of data.

OR

- B) Explain the concept of Dimensionality Reduction.
- 12. A) Explain the concept of K-Nearest Neighbors classifier with an example

OR

- B) Explain the concept of Simple Linear Regression.
- 13. A) What Is a Decision Tree?

OR

B) Explain the idea behind the clustering with an example.