

[Nov-23]

GITAM (Deemed to be University)
[CSEN2161]
GST/GSS/GSB/GSHS Degree Examination
III SEMESTER

INTRODUCTION TO DATA SCIENCE

(Effective for the admitted batch 2021-22)

Time: 2 Hours

Max. Marks: 30

Instructions: All parts of the unit must be answered in one place only.

Section-A

1. Answer all Questions: **(5×1=5)**

- a) Distinguish between categorical and numerical data with suitable examples.
- b) Give the functions in Python used to
 - i) Plot graphs
 - ii) Line graph
- c) Present the formula that relates the main measures of central tendency
- d) What does histogram represent? How many ways bins in histogram be mentioned?
- e) Mention any two guiding principles for data analysis.

Section-B

Answer the following: **(5×5=25)**

UNIT-I

2. Describe the philosophies of data science.

OR

3. Interpret the steps in data preparation in data science.

UNIT-II

4. Outline the purpose of contour graphs. Explain its classification in detail.

OR

5. List out different types of data analytics compare descriptive and diagnostic analysis.

UNIT-III

6. Demonstrate the purpose of regression with an example.

OR

7. Emphasize the need for measures of dispersion with a suitable example.

UNIT-IV

8. Discuss the main features of Weka that facilitate data analytics.

OR

9. Differentiate between SciPy and Sci-kitlearn libraries of Python.

UNIT-V

10. Distinguish between the features of data ownership.

OR

11. Elaborate the need for guidelines for data security in the data analysis process.

[IIS/123]