23BDS301

UG PROGRAM (4 YEARS HONOURS) WITH SINGLE MAJOR
AT THE END OF THIRDSEMESTER
DATA SCIENCE-PYTHON PROGRAMMING FOR DATA ANALYSIS
(B.Sc HONOURS-MAJOR)
(w.e.f. Admitted Batch 2023-24)

Time: 3Hours   Maximum: 70 marks

Section – A

Answer any FIVE Questions.   5 x 4 = 20

1. Define Data analysis and write its features.
2. Discuss the feature of python.
3. What is Vectorized Computation?
4. Discuss about Lamda functions in python.
5. How Pandas are used in python?
6. Explain Universal functions.
7. What is Combining and Merging of Data sets?
8. Explain different python Visualization tools.

Section-B

Answer All Questions.   5 x 10 = 50

9. a) Write about the differences between Data analysis and Data analytics.

(Or)

   b) What are the essential libraries for data analysis in python?

10. a) What are the built-in data structures in python?

(Or)

   b) Discuss about Arrays in python.

11. a) Write the key features of Pandas.

(Or)

   b) Explain how the data is loaded, stored in different file formats in Pandas.

12. a) Discuss how to generate and transform data in python.

(Or)

   b) Write a python program on hierarchical index and joint and combining data.

13. a) Discuss about Stats model in detail.

(Or)

   b) Explain Matplotlib API primer in detail.