

## PYTHON

### Part A

1. Interpret on any four Methods for indexing in Data Frame
2. What are the ways to aggregate data in Python?
3. Compare the Python Matplotlib vs MATLAB.
4. How to create multiple subplots using plt.subplots.
5. Explain the contour plots in python.
6. How data visualization can be done using matplotlib?
7. How to explicit the format operator available in files.
8. How to pandas handle missing data in python?
9. How to identify the issue at handling in data preprocessing?
10. Write a program to find the one's complement of binary number using file.
11. How Do I Read A CSV File As A Text File?
12. How to preprocess the data in python mention it step-by-step?
13. How are scatter plots and histograms different from line graphs?
14. What are 3 popular applications that have been created using Python?

### Part B

1) Explain in detail about Pandas data structures and write suitable example.
2) a) Creating a sample dataset of marks of various subjects using Aggregating data in Pandas.6 b) Write a code for Selecting a single columns and multiple columns using indexing operator.7
3) Write a program to draw a horizontal bar chart with Matplotlib.
4) Describe Reading data from CSV and TXT Files in detail with suitable code
5) Summarize Working with Missing Data in Pandas concepts in detail
6) Write a code for Insertion Sort Visualization using Matplotlib in Python and list out the approaches.
7) Explain in detail about data preprocessing, analysis & visualization in python.
8) Write a short notes on Applications of python in Data science b) Density and Contour Plots