

DEPARTMENT OF Computer Science
Dyal Singh College, University of Delhi

(ACADEMIC SESSION, 2023-24)

Course: B.Sc. (Hons.) Computer Science (Semester V)
Paper Code and Name: Data Analysis and Visualization, BHCS15A (TH)

FACULTY

Name of Teacher: Prof. Anita Goel

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ASSESSMENT DETAILS

Total Marks for the course is 100, comprising following components

- Attendance – 5 marks
 - Individual Assignment – 10 marks
 - Test/ Presentation – 10 marks
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TEACHING PLAN

Week	Topics Covered/ Assignments/ Test/Presentations
1-2	Python for Data Analysis, Essentials of Python Library, Python Interpreter, Python Language Basics, Test
3-7	NumPy ndarray, Pandas data structure, Essential Functionality, Summarizing and Computing Descriptive Statistics, Reading and Writing Data in Text format, Interaction with Web APIs, Interacting with Databases, Handling missing data, data transformation, String manipulation, Test
8-11	Hierarchical indexing, Combining and Merging datasets, API Primer, Plotting with pandas and seaborn, Assignment
12-14	GroupBy mechanics, Data aggregation, General Split-apply combine, Pivot tables and cross tabulation, Date and Time Data types and tools, Time Series basics, Data ranges, Frequency and shifting, Time zone handling
15	Categorical Data, Advanced GroupBy use, Techniques for method Chaining

s/d
Prof. Anita Goel