

**Third Semester FYUGP Degree (Reg) Examination November
2025**

KU3DSCCSC203 - PYTHON FOR DATA ANALYTICS

2024 Admission onwards

Time : 1.5 hours

Maximum Marks : 50

Section A

Answer any 6 questions. Each carry 2 marks.

1. State two career roles available in the field of Data Analytics.
2. Using an example, list the difference between data and information.
3. What is the purpose of data normalization?
4. What is the difference between a bar chart and a histogram?
5. What are numeric types in Python?
6. What is the function used to read a CSV file in Pandas? Provide an example of how to use it.
7. What are the common techniques used in dimensionality reduction?
8. Define IQR method for outlier detection.

Section B

Answer any 4 questions. Each carry 6 marks.

9. Explain branching statements in Python with examples.
10. Analyze the role of numeric types and strings in Python programming.
11. Describe the process of converting a Pandas Series to a DataFrame.
12. You are given a sample dataset containing inconsistent formats and duplicate records. Apply data preprocessing on this dataset and outline the steps you would follow.
13. Discuss how the visualization of data helps in assessing the effectiveness of outlier removal methods.
14. Evaluate mean/median imputation for outlier handling.

Section C

Answer any 1 questions. Each carry 14 marks.

15. Discuss the ethical and privacy issues in Data Analytics with suitable examples.
16. Discuss the importance of data visualization in data analysis. Provide examples.