

INDIRA UNIVERSITY, PUNE

SCHOOL OF INFORMATION TECHNOLOGY- MSC CA

Term End Examination (2025 Pattern) April- May – 2026- Semester – II

Course Name: Introduction to Data Science
Course Code: 25PCA203T

Max. Marks: 25
Time: 1 Hr. 30 Minutes

Instructions

- All questions are compulsory
- Neat diagrams must be drawn wherever necessary
- Non-Programmable calculator is allowed

Q1.	Attempt any 5 out of 7. (1 Mark each) 1. Define Primary Data? 2. List any two applications of Data Science. 3. What is XML Files data format? 4. List any two data scientists Toolbox. 5. List any two outlier detection method. 6. Define Standard deviation. 7. State any two data visualization libraries in Python.	(5 Marks)	CO1
Q2.	Attempt any 2 out of 4. (5 marks each) 1. Differentiate between structured and unstructured data. 2. Compare and contrast descriptive and inferential statistics. 3. Explain types of attributes with suitable example. 4. Explain any four data visualization graphs.	(10 Marks)	CO2
Q.3	Attempt all questions (5 marks each) 1. Calculate mean, mode, median, standard deviation and range for the following list of values: 24, 29, 24, 25, 24, 27, 25, 32, 24. 2. What is visual encoding? Explain Types of Visual encoding. OR	(10 Marks)	CO3
Q.3	Attempt all questions (5 marks each) 1. Illustrate any two data transformation techniques with example. 2. Demonstrate various data preprocessing techniques used in data analysis.	(10 Marks)	CO3
