

INDIRA UNIVERSITY, PUNE

SCHOOL OF INFORMATION TECHNOLOGY - BSC DS

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

Course Name: Advanced Python Programming
Course Code: 25BDS201T

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

Instructions:

- All Questions are compulsory.
- Figures to the right indicates full marks.

Q1.	Attempt any 5 out of 7 (1 Mark each) 1. What is a lambda function? 2. What is an abstract class? 3. Name any two layout managers used in tkinter. 4. What is file handling in Python? 5. What is NumPy used for? 6. Which library is used for advanced visualization in Python? 7. What is a thread in Python?	(5 Marks)	CO1
Q2.	Attempt any 2 out of 4. (5 Marks each) 1. Differentiate between map() and filter() functions with examples. 2. Describe polymorphism with suitable examples 3. Describe database connectivity using sqlite3. 4. Explain the working of web scraping using requests and BeautifulSoup.	(10 Marks)	CO2
Q.3	Attempt all questions. (5 Marks each) 1. Describe different widgets used in tkinter with examples. 2. Explain how Matplotlib is used for data visualization using a Bar chart and a histogram.	(10 Marks)	CO3
Q.3	OR Attempt all questions (5 Marks each) 1. Explain regular expressions and their use in pattern matching. 2. Explain asynchronous programming using asyncio.	(10 Marks)	CO3
