

Reg. No.....

Name.....

**B A, B SC, B COM DEGREE END SEMESTER EXAMINATION - APRIL 2025****UGP (HONS.) SEMESTER - 2: DISCIPLINE SPECIFIC COURSE****COURSE: 24UCAPDSC106: FUNDAMENTALS OF BUSINESS ANALYTICS WITH PYTHON***(For Regular 2024 Admission)*

Time: 1.5 Hours

Max. Marks - 50

**PART A****Answer any 5 questions. Each question carries 2 marks.****(2 × 5 = 10 Marks)**

1. How do you take user input in Python? Write an example. (R,CO1)
2. Differentiate between Compiler and Interpreter. (R,CO1)
3. Explain the basic structure of Python program with example. (U,CO1)
4. Define lambda function with an example (U,CO2)
5. Predict the output of the following (U,CO1)
  - (a) `print(type(10.5))`
  - (b) `print(5 // 2)`
6. Differentiate between Modules and Packages in Python. (A,CO3)
7. Create a dictionary in Python to store the names of three fruits as keys and their colors as values .Then print the dictionary (A,CO5)

**PART B****Answer any 4 questions. Each question carries 5 marks.****(4 × 5 = 20 Marks)**

8. Explain the difference between break and continue statements in loops. (U,CO2)
9. Explain the purpose of descriptive statistics in Python (U,CO3)
10. Define Data cleaning. List and explain three common data-cleaning techniques used in Python. (An,CO3)
11. Write a Python program to read a CSV file and display the first five rows using Pandas. (A, CO5)
12. List the different types of Graphs used in Statistics analysis. (An,CO4)
13. Explain the purpose of indentation in Python. (U,CO1)

**PART C****Answer any 2 questions. Each question carries 10 marks.****(10 × 2 = 20 Marks)**

14. Discuss the different data types in Python with examples. (A,CO1)
15. Explain the different types of functions with suitable examples. (U,CO2)
16. Explain the Measures of Central tendency with examples. Provide examples with real world applications. (C,CO4)

## OBE: Questions to Course Outcome Mapping

| CO  | Course Outcome Description  | CL | QUESTIONS     | TOTAL MARKS |
|-----|---|----|---------------|-------------|
| CO1 | To Explain the basics of Python and installation of Python  | U  | 1,2,3,5,13,14 | 18          |
| CO2 | To comprehend control flow structures such as loops conditional statements (if, elif, else), and how to use them effectively in programming logic | U  | 4,8,15        | 17          |
| CO3 | To define functions, understand their scope, pass arguments, and return values, facilitating code modularity and reusability                      | A  | 6,9,10        | 12          |
| CO4 | To Apply data handling , data cleaning and treatment techniques using python  | An | 12,16         | 15          |
| CO5 | Applying statistical models for data interpretation in Python   | C  | 7,11          | 7           |

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;