Reg No:..... K25FY2427 C
Name :.....

Second Semester FYUGP Computer Science Examination
APRIL 2025 (2024 Admission onwards)
KU2DSCCSC112 (BASICS OF DATA ANALYTICS)
(DATE OF EXAM: 2-5-2025)

Time : 90 min Maximum Marks : 50

Part A (Answer any 6 questions. Each carries 2 marks)

1. What are the types of data analytics? 2
2. What is the purpose of comments in Python? 2
3. Write a line of code that takes user input in Python. 2
4. What is the difference between a list and a tuple in Python? 2
5. How do you import a specific function (e.g., sqrt) from the math module in Python? 2
6. What is the purpose of using the import keyword in Python? 2
7. How do you iterate over all the rows of a two-dimensional array in NumPy? 2
8. What is the use of title() function? 2

Part B (Answer any 4 questions. Each carries 6 marks)

9. Discuss the various career opportunities in data analytics and the skills required for each role. 6
10. Write a Python program that takes input from the user, processes it, and then outputs a result. 6
11. Explain pop(), get(), and update() with example code. 6
12. Explain statistics module in python. 6
13. How does the linspace() function differ from arange()? Explain with an example. 6
14. Explain the use of xlabel() and ylabel(), and how to add a title to a plot. 6

Part C (Answer any 1 question(s). Each carries 14 marks)

15. (a) Write a program to create the following plots for x=[1,2,3,4] and y=[10,20,15,25] a. Bar chart b. Scatterplot c. Histogram 7
    (b) Explain the use of xlabel(), ylabel(), title(), and text() functions for adding labels and annotations to a plot. Give an example. 7
16. (a) How does the numpy.zeros() function differ from numpy.empty() when creating arrays. 7
    (b) Explain the different methods to create arrays in NumPy. 7