	Roll No.											

PRESIDENCY UNIVERSITY
BENGALURU
<u>**RESEARCH & DEVELOPMENT**</u>

Ph.D. Course Work - Mid-Term Examination September 2024

School/Department: Engineering/ Mathematics   **Date**: 27/09/2024

Course Code: MAT 844   **Time**: 10:00AM to 11:30AM

Course Name: Python Programming   **Max Marks**: 50

Course Credit: 2-0-0   **Weightage**: 25%

Instructions:

(i)   Read the question properly and answer accordingly.
(ii)   The question paper consists of 3 parts.
(iii)   Scientific and Non-programmable calculators are permitted.

Part A [Memory Recall Questions]

Answer all the Questions. Each question carries 2 marks.   (5Qx2M=10M)

1. How do you define a function in Python?   (C.O.NO.1) [Knowledge]

2. Explain the feature of append in Python.   (C.O.NO.1) [Knowledge]

3. How do you create a list in Python?   (C.O.NO.1) [Knowledge]

4. What is the difference between a list and a tuple?   (C.O.NO.2) [Knowledge]

5. Define the List with an example.   (C.O.NO.2) [Knowledge]

Part B [Thought Provoking Questions]

Answer all the Questions. Each question carries 4 marks.   (4Qx4M=16M)

6. Explain the features of Python (C.O.NO. 1) [Comprehension]

7. What is a variable? Explain the types of variables with a simple program (C.O.NO. 1) [Comprehension]

8. How do you handle exceptions in Python? Explain. (C.O.NO. 1) [Comprehension]

9. Explain the function with an example (C.O.NO. 2) [Comprehension]

Part C [Problem Solving Questions]

Answer all the Questions. Each question carries 8 marks.   **(3Qx8M=24M)**

10. Write a program to generate the Fibonacci sequence (C.O.NO. 2) [Application]

11. What are Python Packages used in Deep learning (C.O.NO. 2) [Application]

12. What are Pseudo codes? What are the Characteristics of Pseudocode

 (C.O.NO. 2) [Application]