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**Presidency University**

**Bengaluru**

 **Ph.D. Course Work End Term Examinations – JAN-FEB 2025**

**Date**: 03-02-2025

**Time**: 9.30 AM TO 12.30 PM

**Max Marks**: 100

**Weightage**: 50%

**Semester**:

**Course Code**: MAT844

**Course Name**: Python Programming

**School:** SOE

 **Instructions:**

1. *Read the all questions carefully and answer accordingly.*
2. *Do not write any matter on the question paper other than roll number.*

**PART A**

**Answer all the Questions. Each question carries 10 marks. (6Qx 10M= 60M)**

1. Write and explain the syntax of all flow control statements with example? (C.O.NO. 1) [Comprehension])
2. Explain Arithmetic Operators, Comparison Operators, Logical Operators and Bitwise Operators in detail with examples. (C.O.NO. 2) [Comprehension])
3. What is meant by selection, iteration and sequence control structures? (C.O.NO. 2) [Comprehension])
4. What is the general syntax of list comprehension? How do you create a list of squares in python? (C.O.NO. 3) [Comprehension])
5. Define a variable? explain the types of variables with a simple python program

 (C.O.NO. 3) [Comprehension])

1. What are the Python packages used in Deep Learning? (C.O.NO. 4) [Comprehension])

**PART B**

**Answer all the Questions. Each question carries 20 marks. (2Qx 20M= 40M)**

1. What do you mean by Python IDE? Explain in detail.

 State the Tower of Hanoi problem. Write Python program for the same. (C.O.NO. 2) [Application]

 **8**. a). How to randomize the items of a list in place in Python?

 b). Outline break and continue statement in Python with an example. (C.O.NO. 1) [Comprehension]