Python Programming

(16CS448)

Unit - I

- Introduction: History of Python, Features of Python, Python Installation on Windows, LINUX, Running Python Scripts, Variables, Assignment, Keywords, Input-Output, Indentation.

Unit - II

- Types, Operators and Expressions: Types - Integers, Strings, Booleans; Operators- Arithmetic Operators, Comparison (Relational) Operators, Assignment Operators, Logical Operators, Bitwise Operators, Membership Operators, Identity Operators, Expressions and order of evaluations.
- Control Flow: if, elif, else, for, while, break, continue, pass

Unit - III

- Data Structures Lists - Operations, Slicing, Methods; Tuples, Sets, Dictionaries, Sequences. Comprehensions.

Unit - IV

- Functions - Defining Functions, Calling Functions, Passing Arguments, Keyword Arguments, Default Arguments, Variable-length arguments, Anonymous Functions, Fruitful Functions (Function Returning Values), Scope of the Variables in a Function - Global and Local Variables.
- Modules, Exception handling

Unit - V

- Files, Object Oriented Programming OOP in PythonInheritance, Overriding Methods.

Python Text Books Referred

Text Books

1. Python Programming: A Modern Approach, Vamsi Kurama, Pearson

2. Learning Python, Mark Lutz, Orielly (files)

Reference Books

1. Think Python, Allen Downey, Green Tea Press

2. Core Python Programming, W.Chun, Pearson.

3. Introduction to Python, Kenneth A. Lambert, CengageFiles, Object Oriented Programming OOP in Python Inheritance, Overriding Methods.