

PYTHON HIGH LEVEL PROGRAMMING LANGUAGE SYLLABUS

❖ INTRODUCTION:

- Why do we need Python?
- Program structure
- Interactive Shell
- Executable or script files
- User Interface or IDE

❖ MEMORY MANAGEMENT AND GARBAGE COLLECTION:

- Object creation and deletion
- Object properties

❖ BUILT-IN DATA TYPES :

- int
- float
- Complex
- bool
- Type Conversion

❖ OPERATORS:

- Arithmetic operators
- Assignment operators
- Comparison operators
- Logical operators
- Membership operators

❖ BUILT-IN SEQUENCE TYPES AND MAPPING TYPE:

- List
- Tuple
- Set
- Dict
- String

❖ CONTROL STATEMENTS:

- If tests and Syntax Rules
- While and For Loops
- Iterations and Comprehensions

❖ FUNCTIONS:

- Function definition and call
- Function Scope
- Arguments
- Default Arguments
- Keyword Arguments
- Arbitrary Arguments

- Return Values
- The pass Statement
- Python Lambda

❖ **OOPS:**

- Classes and instances
- Classes method calls
- The self-Parameter
- The `__init__()` Function
- Inheritance and Compositions

❖ **MODULES:**

- Module Creations and Usage
- Module Search Path
- Module Vs. Script
- Package Creation and Importing

❖ **EXCEPTION HANDLING:**

- Default Exception Handler
- Catching Exceptions
- Raise an exception
- User defined exception

❖ **FILE HANDLING:**

- Opening a file
- Using Files
- Create and writing in files
- Create and delete folders