### EDUCONF TECHNOLOGIES PRIVATE LIMITED

#### AN ISO 9001:2015 CERTIFIED COMPANY

#### www.educonftech.com

Python is an Object Oriented, High level, Interpreted, Dynamic & multipurpose programing language. Python makes Development & debugging fast because there is no compilation steps. It require less number of lines to finish the program as compare to other programming language like java, c++, etc. Educonf Technologies is the best python training institute in Patna. We also provide python training with live project. In my opinion python is very powerful language that's why Bank of America has chosen python language to maintain its data.

It's design philosophy emphasizes code readability, and its syntax allows programmers to express concepts in fewer lines of code than would be possible in languages such as C. The Python language provides constructs intended to enable clear programs on both a small and large scale.

# Following are the feature of python language:-

- 1) Easy to use.
- 2) Expressive language.
- 3) Interpreted language.
- 4) Cross-platform language.
- 5) Free & Open Source.
- 6) OOP's Concepts.
- 7) GUI.

#### <u>Overview</u>

In this course, Participant will learn to write reusable scripts with Python. Through intensive exercises, participant learn to use Python in your operating system and application environments as well as apply built-in functions of the language and make use of external modules.

#### **Pre-Requisites**

Students should already be comfortable using the operating system (Linux, Unix, Windows, Solaris, Mac OS X, etc.) on which they will be running Python. While not mandatory, basic skills with at least one other programming language are desirable.

# **Duration- 50 Hours**

**Basic Python** 

# 1. Introduction

- History
- Features
- Setting up path
- working with Python

- Basic Syntax
- Variable and Data Types
- Operator

# 2. Conditional Statements

- If
- If- else
- Elif
- Nested if-else

#### 3. Loop

- For
- While
- Nested loops

#### **4. Control Statements**

- Break
- Continue
- Pass

#### **5. String Manipulation**

- Accessing Strings
- Basic Operations
- String slices
- Function and Methods

# 6. Lists

- Introduction
- Accessing list
- Operations
- Working with lists
- Function and Methods

# 7. Tuple

- Introduction
- Accessing tuples
- Working with Tuple
- Functions and Methods

#### 8. Dictionaries

- Introduction
- Accessing values in dictionaries
- Working with dictionaries

Functions

#### 9. Functions

- Defining a function
- Calling a function
- Types of functions
- Function Arguments
- Anonymous functions
- Global and local variables

# **10. Modules**

- Importing module
- Math module
- Random module
- Packages
- Composition

# **11. Input-Output**

- Printing on screen
- Reading data from keyboard
- Opening and closing file
- Reading and writing files
- Functions

#### **12. Exception Handling**

- Exception
- Exception Handling
- Opening and closing file
- Reading and writing files
- Functions

#### Advance Python

# 13. OOPs concept

- Class and object
- Attributes
- Inheritance
- Overloading
- Overriding
- Data hiding

### **15. Regular expressions**

- Match function
- Search function
- Matching VS Searching
- Modifiers
- Patterns

# 16. CGI

- Introduction
- Architecture
- CGI environment variable
- GET and POST methods
- Cookies
- File upload

### 17. Database

- Introduction
- Connections
- Executing queries
- Transactions
- Handling error

### **18. Networking**

- Socket
- Socket Module
- Methods
- Client and server
- Internet modules

# **19. Multithreading**

- Thread
- Starting a thread
- Threading module
- Synchronizing threads
- Multithreaded Priority Queue

# **20. GUI Programming**

- Introduction
- Tkinter programming
- Tkinter widgets