Shiv Chhatrapati Shikshan Sanstha's

Rajarshi Shahu Mahavidyalaya, Latur
(Autonomous)
Department of Information Technology
Online Certificate Course (RSML MOOC's)

Course Title: Hands on Python Programming

Course Code: RSML-PYTHON001

Max. Marks: 100

❖ **Learning Objectives:**

LO 1. Understand basic principles of Python programming language

LO 2. Acquaint with basics of Python programming

LO 3. Learn Python collections with examples

LO 4. Design basic level applications using Python

❖ **Course Outcomes:**

After completion of course the student will be able to

CO 1. Solve numerical as well as non-numerical problems using python programming

CO 2. Adequately use functions, conditional and looping statements

CO 3. Write code in using conditional, looping and functions

CO 4. Handle errors occurred in program

CO 5. Develop basic applications using Python

Week 01:

➢ Course Introduction
➢ What Is Python?
➢ Python Features
➢ Downloading, Installing, Running
➢ Python Working with Python(IDLE)
➢ Basic Syntax
➢ First Python Program
➢ Variable
➢ and Data TypesOperators

Week 02:

- **Conditional Statements:** If, If- else, Nested if-else
- **Looping Statements:** For, While, Nested loops
- **Control Statements:** Break, Continue, Pass
- **Working with Strings:**
- Accessing Strings
- BasicOperations String slices
- Function and Methods

Week 03 :

- **Working with Lists:**
  Introductionn Accessing list Operations
  Function and Methods

- **Working with**
  Tuple: IntroductionAccessing tuples Operations
  Functions and Methods

- **Working with dictionaries:**
  Introduction Accessing values in dictionaries Properties

Week 04:

- **Working with Functions:** Defining a function Callinga function Typesof functions Function Arguments

- **Exception Handling: Exception Exception Handling**
- **Exceptclause Try, finally clause**
- **OOPs concept:** Class and object Attributes Inheritance OverloadingOverriding Data hiding

- ❖ **Course Coordinator**
  Prof. Manjusha Anant Shinde , RSML

- ❖ **Course Teachers**

  1] **Mr. Riyaj Shaikh , RSML**

  2] **Mr. Vishwanath Panchal, RSML**