Programming Fundamentals Using Python

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 4
Pass Percentage: 40%

Section A

Unit I: Introduction: Python installation and setup, Command line Basics; Python Objects.

Unit II: Data Structures Basics: Introduction to Python data types, Variable assignments, accepting input from the console, assignment statement,

Unit III: Expressions, operators and their precedence Numbers, String, String methods, Lists

Unit IV: Python Comparison Operators: Chaining comparis on operators with logical operators, Pass Break and continue. write a lot of programs: interest calculation, primarily testing, and factorials.

Section B

Unit V: Program Flow control in Python: If Elif and Else statements in python, Loops: for loops, While loops

Unit VI: Methods and Functions in python: Introduction to functions, Def keyword, User defined functions, arguments and parameters, Parameter naming in python

Unit VII: Errors and Exception Handling: Introduction to errors, Built-in errors, raising errors in python

Unit VIII: File handling in Python: Files in python, importing own files, Read and writing text files, working with CSV, XML and JSON files.

Suggested Reading:

1. Udemy, https://www.udemy.com/course/python-the-complete-python-developer-course/

2. Timothy Budd, Exploring Python,TMH, 1st Ed, 2011