Certified Python Developer (CPD)

Syllabus: CPD-3.11

Introduction

The certified Python Developer (CPD) is meticulously designed to assess the foundational skills and knowledge of individuals in Python programming. This exam serves as a robust platform for evaluating the examinees' grasp of Python's standard libraries, which are pivotal in addressing basic to intermediate-level tasks.

Exam Syllabus

I. Strings:

- String indexing and slicing
- String methods (e.g., len(), str(), split(), join(), etc.)
- String formatting (e.g., f-string, format())
- Regular expressions

II. Control Flows:

- Introduction to control flow statements
- Conditional statements: if, elif, else
- Nested conditional statements
- Ternary operators

III. Loops:

- For loops (including range function)
- While loops
- Nested loops
- Loop control statements: break, continue, else

IV. Data Structures:

- Lists (including list comprehension)
- Tuples
- Dictionaries
- Sets

V. Standard Functions:

- Built-in functions: len(), type(), print(), input(), etc.
- Lambda functions
- map(), filter(), and reduce()
- Functional programming concepts: first-class and higher-order functions

VI. Standard Libraries:

- Datetime and time modules
- os and shutil modules
- math and random modules
- json, csv, and other data format libraries