

**UNIT I****Chapter 1 : Introduction and Syntax of Python Program
1-1 to 1-17**

Syllabus : Features of Python - Interactive, Object-oriented, Interpreted, platform independent. Python building blocks - Identifiers, Keywords, Indentation, Variables, Comments. Python environment setup - Installation and working of IDE. Running Simple Python scripts to display 'welcome' message. Python Data Types : Numbers, String, Tuples, Lists, Dictionary. Declaration and use of data types.

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Sets : (a) Accessing values in Set, deleting values in Set and updating Sets. (b) Basic Set operations. (c) Built – in Set functions **Dictionaries :** (a) Accessing values in Dictionary, deleting values in Dictionary and updating Dictionary. (b) Basic Dictionary operations. (c) Built – in Dictionaries functions.

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UNIT IV

Chapter 4 : Python Functions, Modules and Packages

4-1 to 4-57

Syllabus : Use of Python built : in functions (e.g. type/ data conversion functions, math functions etc.). User defined functions : Function definition, Function calling, function arguments and parameter passing, Return statement, Scope of Variables: Global variable and Local Variable. Modules : Writing modules, importing modules, importing objects from modules, Python built – in modules (e.g. Numeric and mathematical module, Functional Programming Module) Namespace and Scoping. Python Packages: Introduction, Writing Python packages, Using standard (e.g. math, scipy, Numpy, matplotlib, pandas etc.) and user defined packages.

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Syllabus : I/O Operations : Reading keyboard input, Printing to screen. File Handling : Opening file in different modes, accessing file contents using standard library functions, Reading and writing files, closing a file, Renaming and deleting files, Directories in Python, File and directory related standard functions. Exception Handling : Introduction, Exception handling - 'try: except:' statement, 'raise' statement, User defined exceptions.

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