

Shastri II Year-IV Semester

SEC - 4

Course Name: PYTHON

Objective: the objectives of this Python course encompass providing a foundational understanding of Python programming concepts. It aims to equip students with the skills necessary to write basic Python scripts and comprehend fundamental programming principles and XML tagging.

Learning Outcomes: students will grasp XML tagging & Python fundamentals, including variables, loops, and functions, enabling them to solve basic programming problems. Additionally, they will demonstrate proficiency in applying these concepts to develop simple Python programs.

Practical Skill Assessment :60Marks

Internal Assessment :40 Marks

Unit	Topic	Hours	Credits (4)
01	Introduction: Brief History of Python, Python Versions, Installing Python, Python Documentation. Basic Python Syntax: Basic Syntax, Comments, variables in Python and naming rules, Data Types, Type Conversion, Simple Output, Simple Input, the print method, input method, and Indenting Requirements.	15	01 credit
02	Operators in Python: Arithmetic operators, Relational operators, Logical operators, Bitwise operators, and Identity operators. Decision Control Statement: If control statement, if – else, elif statement, Ternary operator Iterative Control Statement: While loop, for loop, range () function, break, continue, pass, use of else with loop.	15	01 credit
03	Collections: Array, Lists, Strings, Tuples. Functions: Introduction to functions, need of functions. User-defined functions: passing arguments to a function, returning values from functions. Using built-in functions, Recursion, and Lambda expression.	15	01 credit
04	XML Tagging: XML Tagging Techniques, Basic tagging methods: inline, block, and mixed content Advanced tagging techniques: Semantic tagging for content categorization, Metadata tagging for document description and organization	15	01 credit

Reference Book-

1. Learning Python by Mark Lutz; Pratham Books, Bangalore
2. Foundations of Python Network Programming by John Goerzen and Brande Rhodes.
3. Html and Xml for Beginners, Microsoft Press 2002
4. Beginning XML 4th edition