

BCE-C307
PYTHON PROGRAMMING

MM: 100
Time: 3 hrs
L T P
3 1 0

Sessional: 30
ESE: 70
Credits 3

NOTE: The question paper shall consist of three sections (Sec.-A, Sec.-B and Sec.-C). Sec.-A shall contain 10 objective type questions of one mark each and student shall be required to attempt all questions. Sec.-B shall contain 10 short answer type questions of four marks each and student shall be required to attempt any five questions. Sec.-C shall contain 8 descriptive type questions of ten marks each and student shall be required to attempt any four questions. Questions shall be uniformly distributed from the entire syllabus. The previous year paper/model paper can be used as a guideline and the following syllabus should be strictly followed while setting the question paper.

UNIT I

Introduction to Python – Installation, Python Interpreter, Usage and Customization, Editor setup - Variables, Expressions and Statements – Conditionals – Functions.

UNIT II

Variables, Expressions and Statement – Assignment Statements, Variables Name, Expressions & Statements, Order of Operations & String Operations.

UNIT III

Functions – Function Calls, Math Functions, Adding New Function, Definition & Uses, Parameters & Arguments.

UNIT IV

Conditional & Recursions – Boolean Expressions, Logical Operators, Conditional Execution, Chained Conditional Executions, Recursion.

UNIT V

Strings, Lists, Dictionaries, Tuples – Introduction to Strings, Lists, Dictionaries and Tuples Case Studies.

Text Books / References

1. The Python Tutorial available at <http://docs.python.org/3.3/tutorial/>
2. How to Think Like a Computer Scientist: Learning with Python (3rd edition) by: Peter Wentworth Jeffrey Elkner, Allen B. Downey, and Chris Meyers. Free Online Version: <http://openbookproject.net/thinkcs/python/english3e/>
3. Python Documentation available at <http://www.python.org/doc/>
4. A Byte of Python by Swaroop CH available at <http://swaroopch.com/notes/python/>