

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CSE) (Sem.-5)
PROGRAMMING IN PYTHON
Subject Code : BTCS-510-18
M.Code : 78324
Date of Examination : 13-12-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) Explain built-in data types of Python.
- b) What are the key features of Python?
- c) Explain the need for continue and break statements.
- d) Describe list slicing with examples.
- e) How filter is used in Python program? Explain with a suitable example.
- f) Explain raw_input() and input() in Python.
- g) Discuss the need and importance of function in python.
- h) Identify what are the packages in python.
- i) Demonstrate the various expressions in python with suitable examples.
- j) Discuss the various operation that can be performed on a tuple and Lists (minimum 5) with an example.

SECTION-B

2. What is difference between error and exception? Explain exception handling in Python with example.
3. Describe the syntax for the following functions and explain with an example.
 - a) abs()
 - b) max()
 - c) divmod()
 - d) pow()
 - e) len()
4. Write a Python GUI program to create three push buttons using Tkinter. The background colour of the frame should be different when different buttons are clicked.
5. Discuss inheritance in Python programming language. Write Python Program to demonstrate Multiple Inheritance with Method Overriding.
6. Describe the need for catching exceptions using try and except statements.

SECTION-C

7. What are Literals & Data types in Python and explain them with examples?
8. What is the process of compilation and linking in Python? Does Python have OOPs concepts?
9. Describe the different access modes of the files with an example. Consider a line "From Stephen. marquard\@uct.ac.za Sat Jan 5 09:14:16 2008" in the file email.txt. Write Python code to read the file and extract email address from the lines starting from the word "From". Use regular expressions to match email address.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.