Name. _____ **Student Admn. No.: _____**	**Printed Pages:01**

B. Tech First Year (All)
Backlog Examination, June 2023

[Programme: B.Tech] [Semester: II] [Batch:]

Course Title: Introduction To Python Programming **Course Code:** BCS01T1010	**Max Marks: 100** **Time: 3 Hrs.**

Instructions:
1. *All questions are compulsory.*
2. *Assume missing data suitably, if any.*

		K Level	COs	Marks
	SECTION-A (15 Marks) 5 Marks each			
1.	What is the output of print tuple [1:3] if tuple = ('abcd', 786 , 2.23, 'john', 70.2)? Also write the required code in python programming.	K2	CO1	5
2.	Differentiate between NumPy and SciPy in python with suitable example.	K2	CO2	5
3.	What is the difference between break and continue statement?	K3	CO3	5
	SECTION-B (40 Marks) 10 Marks each			
4.	Create a class Employee with data members: name, department and salary. Create suitable methods for reading and printing employee information.	K2	CO1	10
5.	Analyze the JSON module in python, and explain with examples.	K3	CO2	10
6.	Analyze the loops which are used in python, and explain with examples.	K3	CO4	10
7.	Write a program for Adding and Subtracting array in Python using NumPy. OR. Write a program for Adding and Subtracting matrix in Python using NumPy.	K3	CO5	10
	SECTION-C (45 Marks) 15 Marks each			
8.	Write a Python code to demonstrate trigonometric function (sine & tangent) for a given array: X = [0, 30, 45, 60, 90, 120, 135, 150, 180]	K3	CO3	15
9.	Explain in detail about Python Files, its types, functions and operations that can be performed on files with examples.	K3	CO4	15
10	How to read, write, and describe a file in python using Panda library. Explain it with a suitable excel or csv. File. OR Drive a python code for implementing the multilevel inheritance. Also explain the physical significance of inheritance in OOPs.	K3	CO5	15