

Name. _____		Printed Pages:01		
Student Admn. No.: _____				
School of SCSE Backlog Examination, June 2023 [Programme: BCA] [Semester: IV] [Batch:]				
Course Title: Programming In Python Course Code: BCAC2203		Max Marks: 100 Time: 3 Hrs.		
Instructions:	1. All questions are compulsory. 2. Assume missing data suitably, if any.			
		K Leve 1	COs	Mark s
SECTION-A (15 Marks)		5 Marks each		
1.	Explain what is dictionary and how it is created in Python?	K2	CO1	5
2.	What are the basic list operations that can be performed in Python. What is the use of str.upper() and str.lower() functions in string?	K2	CO2	5
3.	Define a property that must have the same value for every class instance (object).	K3	CO3	5
SECTION-B (40 Marks)		10 Marks each		
4.	Write a Python program to accept three numbers, find the greatest and print the result.	K2	CO1	10
5.	Write a Python code to find root of the equation $x + \cos(x)$? Drive the role of optimizer in python?	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 & cosine) for a given array: X = [0, 30, 45, 60, 90, 120, 135, 150, 180]	K3	CO3	15
9.	Explain in detail about Python libraries, its types, functions and operations. with examples.	K3	CO4	15
10.	Create a class Employee with data members: name, department and salary. Create suitable methods for reading and printing employee information.OR..... Drive a python code for implementing the multiple inheritance. Also explain the physical significance of inheritance in OOPs.	K3	CO5	15