

ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27

BCA– IV SEMESTER

SEMESTER EXAMINATION: APRIL 2023

(Examination conducted in May 2023)

**CA4122 PYTHON PROGRAMMING**

Time- 2 hrs Max Marks-60

This question paper contains TWO printed pages and THREE parts

**Part A**

**Answer the following questions (5\*2=10 marks)**

1. List the standard data types in python.
2. What are python strings?
3. What is meant by module in python? List some built in modules in python.
4. What are the advantages of Tuple over List?
5. Write a simple program which illustrates Handling Exceptions.

**PART B**

**Answer any five of the following questions (5\*4=20 marks)**

1. Explain about string slicing with examples.
2. Write a Python program to get a string from a given string where all occurrences of its first char have been changed to "@", except the first char itself.
3. What is Inheritence? Demonstrate Multiple Inheritance with an example using python.
4. Write a Python program that matches a string that has an *a* followed by three 'b'
5. How operator overloading can be implemented in Python? Give an example.
6. Explain usage of try-except keywords with suitable example.
7. What are the basic steps to connect Python with MYSQL and insert values to the table?

**PART C**

**Answer any THREE of the following questions (3\*10= 30marks**)

1. a)Write a python program to read line by line from a given files file1 & file2 and write into file3. (5)

b) Explain Indexing and Slicing operation for the list with example in python. (5)

 14.a)Write a program to create an own module and import the own module and external module. (5)

 b) Explain Lists along with methods associated with lists and explain mutability with respect to Lists. (5)

 15.a) Write a Python program to get the maximum and minimum values of a dictionary. (5)

 b) Write a Python program to check that a string contains only a certain set of characters (in this case a-z, A-Z and 0-9). (5)

16.a) Write a function division() that accepts two arguments. The function should be able to catch an exception such as ZeroDivisionError, ValueError, or any unknown error you might come across when you are doing a division operation. (5)

 b) Create a class Employee with data members: name, department and salary. Create suitable methods for reading and printing employee information. (5)