

Reg. No.

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



**BCACAC 335**

**Choice Based Credit System V Semester B.C.A. Degree  
Examination, February/March 2023  
(2021-22 Batch Onwards)  
PYTHON PROGRAMMING (Group – I)**

Time : 3 Hours

Max. Marks : 80

***Instruction : Answer any ten questions from Part – A and answer any one full question from each Unit in Part – B.***

**PART – A**

1. a) Differentiate tuple and list with example. **(10×2=20)**
- b) List any two differences between Java and Python.
- c) What is the purpose of membership operators ? Give example.
- d) How to create multiline strings in Python ? Give example.
- e) How to compare and concatenate two strings in Python ? Give one example for each.
- f) List four types of actual arguments used in Python function calls.
- g) What is an exception ? List any two built-in exceptions in Python.
- h) Differentiate between accessor methods and mutator methods.
- i) What is a regular expression ? Give an example.
- j) What is root window ? How it is created in Python?
- k) List any four types of databases used with Python.
- l) What is an entry widget ? How it is created ?

**P.T.O.**



## PART – B

## UNIT – I

2. a) Explain numeric data type and bool data type in Python.  
b) Explain the execution of a Python program by PVM.  
c) Explain the different functions used to create an array using the numpy package. (5+5+5)
3. a) Explain the various sequence data types in Python with syntax and example.  
b) Explain any five features of Python.  
c) Explain passing command-line arguments with a program example. (5+5+5)

## UNIT – II

4. a) Explain with syntax and example defining, calling function in Python.  
b) Explain any five methods to process the list.  
c) What is dictionary ? Explain any four methods to process elements of the dictionary. (5+5+5)
5. a) Explain different ways of creating lists with examples.  
b) Explain any five methods to process the tuple elements.  
c) With an example explain returning multiple values from a function. (5+5+5)

## UNIT – III

6. a) What is a class ? How to create a class and object in Python ? Give example.  
b) Explain exception handling in Python with an example.  
c) What is inheritance ? How to implement inheritance in Python ? Give an example. (5+5+5)
7. a) Explain the different types of methods in Python with an example.  
b) Explain creating a thread by creating a subclass to the Thread class. Give an example.  
c) Explain method overloading and overriding with example. (5+5+5)



UNIT – IV

8. a) Explain the steps involved in creating a GUI application in Python with a suitable example.
  - b) Explain how to connect to the MySQL database and retrieve all the rows from a table with a suitable example.
  - c) Write a note on arranging widgets in a frame using layout managers. **(5+5+5)**
  9. a) Write a note on the following :
    - i) Text Widget
    - ii) Checkbox Widget.
  - b) Explain how records are inserted and deleted from the MySQL database with a suitable example.
  - c) Explain the functions related to TCP/IP server and TCP/IP client. **(5+5+5)**
-