

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**MCA (Sem.-1)**  
**PROGRAMMING IN PYTHON**  
**Subject Code : PGCA-1951**  
**M. Code : 79036**  
**Date of Examination: 12-01-2023**

**Time : 3 Hrs.**

**Max. Marks : 70**

### INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION - B & C. have FOUR questions each.**
3. **Attempt any FIVE questions from SECTION B & C carrying TEN marks each.**
4. **Select atleast TWO questions from SECTION - B & C.**

## SECTION-A

- 1. Write short notes on/Fill in the blank :**

- a) Application of python
- b) Scope of variables in python
- c) List vs. tuple
- d) Decorators in Python.
- e) Non-associative operator
- f) Python input and output function
- g) Python package.
- h) Define class in Python
- i) Constructors in python
- j) init method.

## SECTION-B

2.
  - a. Briefly describe the features of python language and how it is different from other languages?
  - b. How to set up path and environment variables in python?
3. What are mutable data types in python? Also, explain the differences between these mutable data types.
4. Briefly explain python control statements and why they are needed. Discuss various control statements used in Python.
5. Explain **any four** methods on each of the following storage collection types
  - a. file
  - b. set
  - c. dictionary with examples.

## SECTION-C

6.
  - a. What is python module and briefly explain the ways of importing a module?
  - b. Briefly explain any four string object methods.
7. Briefly explain the difference between pass by value and pass by reference with suitable example.
8. Briefly explain lambda function in python with suitable example. Also explain filter( ), map( ) and reduce( ) functions.
9. Write a short note on :
  - a. Built in vs. user defined exceptions.
  - b. Garbage collection

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