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 : 16-12-2024

Time: 3 Hrs. Max. Marks: 70

# **INSTRUCTIONS TO CANDIDATES:**

- 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 at least TWO questions from SECTION B & C.

# **SECTION-A**

# 1. Write short notes on:

- a. What do you mean by precedence and associativity of operators?
- b. What are user-defined exceptions? How are they created?
- c. Write a brief note on tuples.
- d. Discuss the history of Python.
- e. How are function arguments passed by reference?
- f. Explain the usage of continue statement.
- g. What is return statement used for?
- h. How are files renamed?
- i. How is a class created?
- j. What is a global variable? How is it used?

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#### **SECTION-B**

- 2. Discuss the main application areas of Python. Explain the installation process and environment setup of Python. List the differences between Python and other popular programming languages.
- 3. Write a program to illustrate difference between implicit and explicit data type conversion in Python. Discuss in detail the input and output functions available in Python.
- 4. What are the various iterative statements used in Python? Write a program to find the greatest number from three numbers using if-elif-else statement. Write a program to calculate the sum and average of first 10 numbers using while statement.
- 5. Write a detailed note on lists. Demonstrate how lists are concatenated.

# **SECTION-C**

- 6. What are recursive functions? How is recursion different from iteration? Write a program to calculate the factorial of a number recursively.
- 7. Write a detailed note on modules explaining how they are created and imported.
- 8. Discuss the attributes of file object. Explain the usage of read and write methods.
- 9. How are the objects created and destroyed in Python? What do you mean by 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.

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