M.Sc.(IT)/MCA/PGDCA (Sem.–1)

FUNDAMENTALS OF COMPUTER AND PROGRAMMING IN PYTHON

Subject Code : PGCA-1902

M.Code : 76972

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

Q1. Explain the following :

a) CPU

b) RAM

c) OCR

d) Big Data

e) Dictionary in Python

f) Recursion

g) Built-in Exceptions

h) File operations

i) Abstract Classes

j) Garbage Collection

SECTION-B

2. Discuss the following terms :

    (a) Motherboard

    (b) Main Memory Unit

    (c) Cache Memory

    (d) Bar code reader

    (e) Expansion cards

3. Explain different types of computer languages and compare them. Also discuss the role of operating system and utility programs in computing.

4. There are Mutable and Immutable data types in python. List both of them with the advantages and disadvantages of using them in any real-time scenario of your choice.

5. Write a program that uses exactly four python "for loops" to print the sequence of letters ahead : AAAAAAAAAABBBBBBBCDCDCDCDEFFFFFFFG

SECTION-C

6. What are python functions? What are the advantages of modularizing programs? Also explain what are user defined functions and anonymous functions.

7. Explain the significance of python modules using any examples of your choice.

8. What are exceptions? What is the role of exception handling? Explain in detail.

9. Describe the components of object oriented programming paradigm in detail.

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