III Semester B.C.A. Examination, February/March 2024
(NEP Scheme) (F+R)
COMPUTER SCIENCE
Python Programming

Time : 2½ Hours

Max. Marks : 60

Instruction : *Answer **four** questions from **each** Part.*

PART – A

I. Answer **any 4** questions. **Each** question carries **2** marks.　　　(4×2=8)

1) Why Python is called Dynamically Typed Language ?

2) Explain Concatenation and Repetition Operators.

3) What is List ? Give an example.

4) Define Local Variables and Global Variables.

5) Tuples are Immutable. Explain with an example.

6) What is the difference between text file and binary file ? Give an example of each.

PART – B

II. Answer **any 4** questions. **Each** question carries **5** marks.　　　(4×5=20)

7) What does break and continue statements do in Python ?

8) What are Data Types ? Explain the Python Built in Data Types.

9) Explain how to create and read text data in a file in Python. What is the difference between writing and appending data to a file ?

10) Explain different types of inheritance in Python.

11) What is Matplotlib ? Write the features of Matplotlib.

12) Explain any 6 Built in functions in Tuple.

PART – C

III. Answer **any 4** questions. **Each** question carries **8** marks.   (4×8=32)

13) a) What are looping statements ? Explain with example.   4

    b) Write a Python program to calculate area of triangle.   4

14) a) Explain any 4 functions in random module.   4

    b) Explain the Command Line Arguments using getopt module.   4

15) a) What are the difference between del, remove(), and pop() method ?   4

    b) Explain keys(), values() and items of Dictionary.   4

16) a) How can a CSV file be created and manipulated in Python using CSV module ?   4

    b) Explain the methods for Pickling and Unpickling.   4

17) a) Explain seek() and tell() with an example.   4

    b) What is Polymorphism ? What are the main advantages of Polymorphism ?   4

18) a) Write a Python program to create a Bar Chart from CSV files using Matplotlib.   4

    b) What is JSON ? Explain different JSON formats.   4

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