



NP – 397

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.

P.T.O.



PART – C

III. Answer **any 4** questions. **Each** question carries **8** marks.

(4×8=32)

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| 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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