29

III Semester B.C.A. Degree Examination, March/April 2023
(NEP) (Freshers) (2022-23 and Onwards)
COMPUTER SCIENCE
Python Programming

Time : 2½ Hours

Max. Marks : 60

Instruction : Answer **all** the Parts.

PART – A

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

1. Why python is an interpreted language ?

2. Explain membership operators.

3. What is a tuple ? Give an example.

4. Define encapsulation and inheritance.

5. What is constructor method in python ?

6. What is a file ? Mention the type of files.

PART – B

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

7. Explain the features of python.

8. What is string slicing in python ? Explain with examples.

9. What is the difference between lists and tuples ? Explain with examples.

10. Explain how you create classes and objects in python.

11. Explain different file modes in python.

12. What is data visualization ? List the libraries that are used for data visualization in python.

PART – C

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

13. a) What are tokens ? Explain various tokens in python with examples.   **4**

    b) Explain core data types in python.   **4**

14. What are functions ? How to define and call a function in python ? Explain with example.   **8**

15. a) Explain if... elif... else control flow statement with example.   **4**

    b) Write a program to perform indexing and slicing in lists.   **4**

16. How do you perform reading and writing files in python ? Explain with an example program.   **8**

17. Define pickling in python. Explain serialization and deserialization.   **8**

18. a) Explain matplotlib.   **4**

    b) Write python code to create a simple plot using matplotlib module.   **4**

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