035CSC011 – F – 24 – 6781

FIFTH SEMESTER B.SC. (NEP) DEGREE EXAMINATION, FEBRUARY 2024

COMPUTER SCIENCE (Optional)

DSC – 1 : Programming in Python

Time : 2 Hours] [Max. Marks : 60

***Instruction** : Answer **all** Parts based on **internal** choices.*

PART – A

Answer **any five** of the following. **Each** carries **two** marks : **(2×5=10)**

1. List any two applications of Python.
2. What are the advantages of Python ?
3. Define range() with syntax.
4. What do you mean by Lambda expression ?
5. What is exception ?
6. What do you mean by dataframe ?

PART – B

Answer **any 4** of the following. **Each** carries **5** marks : **(5×4=20)**

7. What are tokens ? Explain various tokens in Python with example.
8. Define recursion. Explain it with example.
9. What is string slicing in Python ? Explain with example.
10. Explain the concept of inheritance with simple example.
11. What is data visualization ? List the libraries that are used for the data visualization in Python.

[P.T.O.

PART – C

Answer **any 3** of the following. **Each** carries **ten** marks : **(10×3=30)**

12. Explain loop control structures with example.

13. Discuss string functions available in Python.

14. What is encapsulation ? Explain it with example and define polymorphism and explain it with example.

15. Write a program to create array using Numpy and perform operations on array.
