

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



Time: 2½ Hours

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

Ans	wer 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? Expla with example.	in 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