

Dog Ma				
Reg. No.			1	

III Semester B.C.A. Degree Examination, March/April - 2024 COMPUTER SCIENCE

Python Programming (Theory)

(NEP Scheme 2021)

Paper: CA-C13T

Time: 21/2 Hours

Maximum Marks: 60

Instructions to Candidates:

Answer all the sections.

SECTION-A

LIBRARY

Answer any Four questions. Each question carries 2 marks.

 $(4 \times 2 = 8)$

- 1. Explain types of comments in python.
- 2. Give the purpose of Indentation in python.
- 3. What are actual and formal parameters?
- 4. What is pickling and unpickling?
- 5. Differentiate text file and binary file.
- 6. What is the need of using Matplotlib for data visualization in Python?

SECTION-B

II. Answer any Four questions. Each question carries 5 marks.

 $(4 \times 5 = 20)$

- 7. Describe decision control flow statements in python.
- 8. Explain string slicing and joining operations.
- 9. Explain traversing a list in python with suitable example.
- 10. Distinguish between single and multiple Inheritance with examples.
- 11. What are the advantages of using web API?
- 12. What are the steps followed to plot a simple line graph in python.

P.T.O.

SECTION - C

III.	Ans	wer a	ny Four questions. Each question carries 8 marks.	$(4 \times 8 = 32)$
	13.	a)	Write a python program to demonstrate basic data types.	(4)
185		b)	Explain function definition and function call with examples.	(4)
*	14.	a)	Explain the purpose of "return" statement in python.	(4)
î a		b)	Write a program to accept the radius of a circle from user and compu	
				(4)
	15.	a)	How membership operators (in and not in) works with a dictionary?	(4)
	•	b)	Differentiate between Lists and Tuples.	(4)
,	16.	a)	Explain access modifiers in python.	(4)
		b)	Explain the steps to create and read a text file in python.	4 (4)
	17.	a)	Explain method overriding with an example.	(4)
	4	b)	Discuss the concept of CSV files in python.	(4)
	18.	a)	What are the features of JSON?	(4)
		b)	Explain the plot () method parameters for customizing a line graph.	(4)