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DCCA303

Reg. No. | | | | | | | | | |

III Semester B.C.A. Degree Examination, January/February- 2025

COMPUTER SCIENCE

Python Programming

(NEP Scheme, F+R)

Time : 2½ Hours **Maximum Marks : 60**

Instructions to Candidates:

Answer All the Sections.

SECTION - A

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

1. Mention any two features of Python.
2. What is the use of range( ) function in Python?
3. Explain membership operators.
4. What is absolute and relative path?
5. Define encapsulation and inheritance.
6. What is Matplotlib?

SECTION - B

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

7. What do you mean by slicing? Explain its types with example.
8. Explain any four built-in functions used in Python.
9. Differentiate between list and tuple.
10. Explain the types of constructor with example.
11. Explain different JSON Formats.
12. Explain different file modes in Python.

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SECTION - C

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

13. Explain the different types of control flow statements with example. (8)

14. Explain the basic concepts of object oriented programming in Python. (8)

15. With example, explain any five list methods. (8)

16. a) How to generate random numbers? Write a Python program to generate random numbers. (5)

    b) Explain the concept of Indexing in Python. (3)

17. a) Explain Pickling and Unpickling. (4)

    b) Explain the concept of DUCK Typing. (4)

18. a) What is data visualization? Discuss the process of data visualization using plotly. (4)

    b) Write a Python code to create a simple plot using Matplotlib module. (4)