52501/125C1A/ 120C1A/127C1A/ 126C1A/141C1A

Time: Three hours

Maximum: 75 marks

PART A - (10 × 2 = 20 marks)

Answer any TEN questions.

- 1. Define: "Computer Software".
- 2. What are the advantages of computer algorithms?
- 3. How will you declare a variable in python?
- 4. What do you mean by Boolean expressions?
- 5. State the purpose of indentation in Python.
- 6. What is string?
- 7. Mention the uses of calling value.
- 3. Comment on variable scope.
- 9. Show the advantages of software objects.
- 10. What is top-down design?
- 11. Write a note on encapsulation.
- 12. Define the term "NumPy".

I BCA -> python Programming

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions.

- 13. Describe the essence of computational problem solving.
- 14. Explain the various types of operators in python.
- 15. Distinguish between the definite and indefinite loops.
- 16. Summarize the building blocks of python programs.
- 17. Elaborate the steps to reading and writing text files.
- 18. Point out the advantages of inheritance.
- 19. What are the dictionary types in Python? Explain.

PART C —
$$(3 \times 10 = 30 \text{ marks})$$

Answer any THREE questions.

- 20. Illustrate the different types of literals available in python with example.
- 21. Discuss the syntax and example for the While statement in python.

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- 22. Outline the need of default arguments in python.
- 23. Evaluate the methods used in Turtle graphics.
- 24. Determine the built-in functions of packages matplotlib.

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