

NOVEMBER 2023 57702/CS21B/436C1B

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer any TEN questions.

1. Mention the meaning of '*self*' keyword.
2. Define the term — Method Overloading.
3. What is ThreadPoolExecutor?
4. What is meant by Race conditions in Threading?
5. Define the term — Deadlock.
6. What is Sqlite?
7. Define the term — Client-Server programming.
8. What are Sockets?
9. Define the term Widgets.
10. What is Digital image processing?
11. What is NumPy?
12. What is meant by Python Data analysis?

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. Describe the purpose of Iterators using an example.
14. Discuss on Daemon Threads and join() a Thread.
15. Explain the method of working with many Threads.
16. Describe the method of creating and altering a Database Table.
17. Discuss on TCP and UDP Protocols.
18. Write short notes on GUI building libraries.
19. Explain the method of adding new data in a Data frame and deleting data from a Data frame using Pandas.

PART C — (4 × 10 = 40 marks)

Answer any FOUR questions.

20. Explain the importance of Assertion, Decorators and Generators.
21. Describe about Producer-Consumer Threading using Lock and Queue.

22. Discuss on the method of Establishing a Connection, creating a New Database and connecting to an existing Database.
 23. Explain the fundamentals of Network programming in detail.
 24. Describe the method of creating List box, Menu, Radio button, and Scroll bar in Python GUI.
 25. Discuss on the method of Data visualization using Matplotlib in detail.
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