MAY 2024 **U/ID 46505/UCC3A**

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. What is Token?
2. What are manipulators?
3. What is friend function?
4. What is Constructor?
5. What is multilevel inheritance?
6. What is Polymorphism?
7. What is data structures?
8. What is Recursion?
9. What is Stack?
10. Define Binary Tree.
11. What is Graph?
12. What is Hashing Table?

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. Explain various types of operators with examples.

14. Explain the operator overloading with example.

15. Explain the types of inheritance with examples.

16. Explain the various file operations.

17. Briefly explain polynomial addition with example program.

18. Explain the operations on tree traversals with examples.

19. Explain shortest path algorithm with examples.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Explain the various control structure in C++.

21. Explain the types of constructors with examples.

22. Briefly explain the managing console I/O operations with suitable examples.

23. Explain the concept of singly linked list and doubly linked list with examples.

24. Briefly explain the Diskstra's algorithm and Hashing functions with examples.

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