MAY 2025

P/ID 16301/PIT1A/ PCATA

Time : Three hours Maximum : 80 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Define token.
2. What are cin and cout?
3. State the use of Pointer.
4. Write any two rules for naming an identifier.
5. What is an explicit type conversion?
6. Define polymorphism.
7. What is the use of command line arguments?
8. List the operations performed on arrays.
9. Differentiate stack and Queue.
10. Draw the structure of singly linked list.
11. What is tree?
12. Define hash table.

PART B — (5 × 6 = 30 marks)

Answer any FIVE questions.

13. Write a C++ program to find the factorial of a given number using function.

14. Explain pass by value parameter passing technique with an example.

15. Discuss Hierarchical inheritance with an example.

16. Elucidate the function overloading with an example.

17. Elaborate file opening modes in detail.

18. Discuss stack operations with an example.

19. Elucidate BFS with an example.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Elaborate the C++ control structures in detail.

21. Explain binary operator overloading with an example.

22. Discuss with an example how insertion, deletion and searching is done in singly linked list.

23. Elaborate in order and post order tree traversals in detail.

24. Elucidate Dijkstra's Algorithm with an example.

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