

APRIL 2021

50410/SAZ3A/SAE3A

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions, each in 30 words.

1. How do you declare variables?
2. Write the function program segment for Swapping two values.
3. Mention some special operators in C++.
4. Write the general form of an operator function. Give an example.
5. Distinguish between static and dynamic polymorphism.
6. What are the purposes of `getc()` and `putc()` functions?
7. Give an example of opening a file using `open()` function.
8. What is meant by command-line arguments?
9. Define prefix and postfix expression.

10. Write the node structure of doubly linked list.
11. Define Subgraph.
12. What is meant by tree traversal?

PART B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. Distinguish between inheritance and polymorphism.
14. What are the various types of expressions? Explain any two of them.
15. Explain the use of destructors with an example.
16. How do you define member functions in the class specification?
17. Write a note on 'Ordered Lists'.
18. Explain the procedure to add and delete an element in a stack.
19. Describe the linked representation of binary trees.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Explain call by value and call by reference with program examples.
 21. Distinguish between single and multiple inheritance.
 22. Describe the stream classes available for file operations.
 23. Write short notes on:
(a) Circular Queue (b) Linked List.
 24. Discuss Hash tables and Hashing Functions in detail.
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