

NOVEMBER 2019

50410/SAE3A/
SAZ3A

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. What is an identifier?
2. List the data types in C++.
3. Define Function Prototyping.
4. Define a class.
5. What is operator overloading?
6. What is a file?
7. What are data structures?
8. What is an array?
9. Write any two applications of Queue.
10. What are the different types of linked lists?
11. Define siblings.
12. Define directed graph.

II B.sc (CS) - Programming in C++ and Data Structures.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions

13. What are inline functions? Explain with an example.
14. Write a C++ program to explain multiple inheritance.
15. Explain function overloading in C++ with an example.
16. Describe the various file mode options available in C++.
17. Give a brief account on asymptotic notations.
18. Write a note on doubly linked list.
19. Explain any three hash functions.
21. Explain the different types of constructors in C++ with examples.
22. Describe the various classes for file stream operations in C++.
23. Explain the algorithm to convert given infix expression into a postfix expression.
24. Discuss the traversal techniques of binary trees.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions

20. Explain the following with examples:
 - (a) Call by reference
 - (b) looping structures in C++.