

NOVEMBER 2018

50410/SAZ3A/
SAE3A

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Define identifier. Give examples.
2. Distinguish between objects and classes.
3. What is a friend function?
4. Write the general form of a class declaration.
5. Define Constructor and destructor.
6. Mention the use of width() and precision() functions.
7. What are input and output streams?
8. Define data structure.
9. Convert the following expression into postfix form:
 $A - B + C / D * E$
10. Mention some applications of stack.

II Bsc comp sci \Rightarrow Programming in C++

11. Distinguish between tree and graph.

12. Write any two kinds of hash functions.

SECTION B — (5 × 5 = 25 marks)

Answer any FIVE questions.

13. How do you pass parameters to functions? Explain.

14. Write a C ++ program to perform various arithmetic operations using inline function.

15. What is hybrid inheritance? Explain.

16. Write the basic rules for virtual functions.

17. Briefly explain command-line arguments.

18. Write short notes on 'Queue'.

19. How do you convert a forest into a binary tree? Give an example.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

20. Discuss various control structures in C++.

21. Explain operator function and write a C++ program to illustrate unary operator overloading.

22. How do you open and close a file in C++? Explain with an example program.

23. Explain the algorithm to add two polynomials using linked list.

24. Write short notes on:

(a) Array Representation of binary trees

(b) Dijkstra's Algorithm.