APRIL 2025 **53502/120C2A/141C2A**

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. What is the need for object orientation?
2. Define encapsulation.
3. What do you mean by namespace?
4. What are default arguments?
5. Write the use of comma operator.
6. What is conversion function?
7. What is virtual base class?
8. Write the uses of pure virtual function.
9. Define function template.
10. What is a rethrowing exception?
11. What are manipulators?
12. What is Random access I/O?

PART B — ($5 \times 5 = 25$ marks)

Answer any FIVE questions.

13. Explain the terms modularity and hierarchy with examples.

14. Describe the use of friend function with a C++ program.

15. List out the advantages and disadvantages of operator overloading.

16. Compare function overloading and operator overloading.

17. Explain the concept of function overriding.

18. Outline the concept of containers.

19. Explain how to open and close a file with an example program.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

20. Illustrate the various types of constructor with examples.

21. Develop a C++ program to perform the binary operator overloading.

22. Discuss the various types of inheritance with examples.

23. Elaborate the exception handling mechanism with an example.

24. Explain the various formatted I/O streams in C++ with examples.

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