

OBJECT ORIENTED PROGRAMMING IN C++

Time : Three hours

Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. Mention the advantages of OOP languages.
2. What are the characteristics of arrays?
3. Compare break and continue statements with examples.
4. What are the advantages of friend functions? Explain.
5. What are inline functions? Discuss its advantages and disadvantages.
6. Describe the use of public, private, and protected access specifiers.
7. Explain the concept of reference arguments with an example.
8. Define polymorphism. What is its use?
9. List the keywords that cannot be overloaded.
10. What are abstract classes? Explain.

PART B — (4 × 10 = 40 marks)

Answer any FOUR questions.

11. What is the difference between call-by-value and call-by-reference?
12. What are friend functions and friend classes?
13. Write a program to declare a class with private data members. Accept data through constructors and display the data with destructor.
14. Explain overloading binary operator using friend function with an example.
15. Explain the types of base classes with appropriate examples.
16. Explain typecasting. What are explicit and implicit type conversions?

PART C — (2 × 15 = 30 marks)

Answer any TWO questions.

17. Describe types of derived data types.
18. Explain the types of constructors in C++.
19. Write a C++ program to show how the unary minus operator can be overloaded.