

**5218/A22**

**MAY 2011**

---

**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 differences between while and do-while loop statements?
3. What are the characteristics of arrays?
4. Write a C++ program to find the sum of N given numbers.
5. Write short note on function prototyping.
6. Explain member variable and member function with example.
7. Write a C++ program to illustrate single inheritance.

8. List the rules for overloading operators.

9. How the polymorphism be achieved? Explain.

10. Describe the uses of 'this' pointer in detail.

**PART B — (4 × 10 = 40 marks)**

Answer any **FOUR** questions.

11. Explain typecasting. What are explicit and implicit type conversions?

12. Write short notes on destructors.

13. Discuss the use of function overloading with example.

14. Write the rules for virtual functions.

15. Write a C++ program to show how the unary minus operator can be overloaded.

16. What are the rules for virtual function? Explain with example.

2

**5218/A22**

**PART C — (2 × 15 = 30 marks)**

Answer any **TWO** questions.

17. Explain the key concepts of OOP.

18. Explain the copy constructors and dynamic constructors with example.

19. Explain the concept of overloading binary operators with an example.

3

**5218/A22**