

MCA-649

**MCA-09/
PGDCA-07**

**M.C.A./P.G.D.C.A. DEGREE/DIPLOMA
EXAMINATION – JUNE 2008.**

First Year/Second Semester

C++ AND OBJECT ORIENTED PROGRAMMING

Time : 3 hours

Maximum marks : 60/75

**Answer for 5 marks questions should not exceed
2 pages.**

**Answer for 10/15 marks questions should not exceed
5 pages.**

PART A — (4 × 5 = 20)/(5 × 5 = 25)

- 1. Why is C++ called as object oriented programming language?**
- 2. Explain function overloading with an example.**
- 3. What are 'static' variables? Write their scope rules.**
- 4. What is a friend function? Explain it.**
- 5. Define constructor overloading. Explain it.**

6. Explain virtual base class with a suitable example.
7. Distinguish between function templates and class templates.

PART B — ($4 \times 10 = 40$)/($5 \times 10 = 50$)

8. Explain the control structures provided in C++.
 9. Define operator overloading. Explain the method of overloading + and * for addition and multiplication of complex numbers.
 10. Explain the various forms of Inheritance.
 11. Write a program in C++ that implements a stack using abstract data types.
 12. Write a program in C++ to sort an array of integers.
 13. Explain the file handling techniques used in C++.
 14. What is exception handling? Explain the exception handling facility provided in C++.
-