

MCA-419**MCA-09/
PGDCA-07**

**M.C.A. DEGREE/P.G.D.C.A. EXAMINATION –
JUNE 2009.**

Second Semester/First Year

C++ AND OBJECT ORIENTED PROGRAMMING

Time : 3 hours

Maximum marks : 60/75

PART A — (4 × 5 = 20/5 × 5 = 25 marks)

Candidates with enrolment number starting with A5BCA and C5BCA should answer any FOUR from the questions 1 to 6 and all others should answer any FIVE from the questions 1 to 7 in Part A.

1. What are the Applications of Object Oriented Programming?
2. What are the characteristics of Arrays?
3. Explain Overloading Binary Operator using Friend Function with an example.
4. Discuss “if” statements.
5. Explain Class Templates with an example.
6. Explain Pass by Reference with an example.
7. Discuss the Benefits of Modeling in UML.

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

Candidates with enrolment number starting with A4MCA and C5MCA should answer any FOUR from the questions 8 to 13 and all others should answer any FIVE from the questions 8 to 14 in Part B.

8. Explain how will you declare and initialize a Class and explain with example.
9. Create a program for EB-Bill preparation using Static Member Functions.
10. Explain different types of Operators with example.
11. Explain in detail about Multiple Catch Statements with an example.
12. Create a function template program for sorting list of elements using Bubble sort method.
13. Describe Virtual Base Class with an example.
14. Explain any 5 UML class diagrams.
