Subject Code—384

M.C.A. (Third Year) EXAMINATION

(Main & Re-appear for Batch 2009 Onwards)

(5 Years Integrated Course)

OBJECT ORIENTED PROGRAMMING
USING C++

MCA-302

Time : 3 *Hours*   *Maximum Marks :* 70

Section A

Note : Attempt any *Seven* questions.   **7×5=35**

1. Explain the concept of inheritance in C++.

2. Define a Pure virtual function and its utility in C++.

3. Why a constructor function required in C++ ? What is the advantage of default argument in a constructor ?

4. What do you mean by dynamic initialization of an object ? Give an example.

5. Explain the role of 'this' pointer in C++ with suitable example.

6. Differentiate between template function and template class with suitable examples.

7. Describe exception handling in C++.

8. Define Reference variable. What are the advantages of reference variable ?

9. List the difference between member and non-member functions.

10. An object oriented approach is better than traditional approach. Justify.   **7×5=35**

Section B

Note : Attempt all questions.

11. (a) What is copy constructor ? How is it different from assignment operator overloading ? Give example.   **6**

(b) When is a friend function compulsory ? Give an example.   **6**

Or

Write a statement that will create an object called fob for writing, and associate it with a file name DATA.

12. Explain the following with suitable examples :

(a) Patterns and meta data

(b) Operations and methods.   **6×2=12**

Or

What do you mean by Polymorphism ? Explain its implementation in C++ with an example. **12**

13. (a) What is an operator function ? Describe the syntax of an operator function.   **5**

(b) What are the various data access specifier ? How these are used when a class is created ? Explain with syntax.**6**

Or

Explain the concept of abstraction features in C++ with suitable example.   **11**