(Please write your Exam Roll no)

Exam Roll No........................

END TERM EXAMINATION

SECOND SEMESTER [MCA] MAY-2010

Paper Code: MCA 110

Subject: Object Oriented Programming & c++

Paper ID:44110

Time: 3 Hours

Maximum Marks: 60

Note: Question 1 is Compulsory. Attempt one question from each unit.

Q-1 Answer the following: (2X6=12)

(a)Explain the use of reference variable with example.

(b)What are the advantages of 'new 'operator and malloc () function.

(c) What is the need of pure virtual functions?

(d)When will you make the function inline? Why?

(e) What do you mean by a file mode in c++? Explain various file modes with example.

(f) when a catch(...) handler ?

UNIT-I

Q2(a) Write a program to demonstrate different types of constructor functions.(6)

(b)Explain any 3 uses of scope resolution operator with example.(6)

OR

(a) What the benefits are of object oriented programming over procedural programming.(6)

(b) Write short notes on: (6)

(i)Data Hiding and Encapsulation

(ii)Default argument functions

UNIT-II

Q3 (a) Write a program to demonstrate class template with multiple parameters.(6)

(b)What does polymorphism mean in c++ language? (6)

UNIT-III

Q-4 (a) Write a program to overload << and >> operator.(6)

(b)Write short notes on: (6)

(i)Delegation (ii)Containership

OR

(a)Write a program for data conversion between built_in and user defined data type.(6)

(b)Explain how can base class constructor be invoked through derived class constructor? Also, explain the need of virtual base class in hybrid inheritance.(6)

UNIT-IV

Q-5(a) Explain any six 'ios' format functions with example.(6)

(b)Write a program in c++ that reads a text file and creates another file that is identical except that every sequence of consecutive blank space is replaced by a '@' symbol.(6)

OR

(a) What is an exception? What is the procedure for handling exceptions in c++? Explain with example.(6)
(b) Explain with example various types of containers used in STL.(6)