END TERM EXAMINATION

THIRD SEMESTER [BCA] DECEMBER 2014

Paper Code: BCA209	Subject: Object Oriented Programming Using C++ (Batch: 2011 onwards)
Time : 3 Hours	Maximum Marks :75

Note: Attempt any five questions including Q.no.1 which is compulsory.

Q1   Answer the following:-
    (a) Explain encapsulation and data hiding features of C++.   (2)
    (b) Explain the persistent objects in C++.   (2)
    (c) Explain garbage collection in C++.   (2)
    (d) Explain ambiguity in multiple inheritances.   (3)
    (e) Compare meta class and abstract class.   (2)
    (f) Explain multiple catch statement used in exception handling.   (2)
    (g) Compare macros and inline functions.   (2)

Q2   (a) Explain the features of procedure oriented programming.   (5)
    (b) Explain the features of C and C++ programming languages.   (5)
    (c) Compare features of various C++ compilers.   (5)

Q3   (a) Write a program to illustrate new and delete operators in C++.   (6)
    (b) Explain *this* pointer. Give an illustration.   (4)
    (c) Write a program to illustrate static function and static variable in a class.   (5)

Q4   (a) Write a C++ program to illustrate Friend Class.   (5)
    (b) Write a program to illustrate operator overriding.   (6)
    (c) Explain parametric polymorphism.   (4)

Q5   (a) Write a C++ program to overload the following operators:-   (6)
      (i) --
      (ii) ++
      (iii)!=
    (b) Write a C++ program to illustrate overloading of template functions. (6)
    (c) Explain early binding and late binding.   (3)

Q6   (a) Write a program to illustrate error handling in file operations.   (5)
    (b) Explain the working of exception handling in C++.   (5)
    (c) Write a C++ program to illustrate virtual base class.   (5)

Q7   Write short notes on **any three** of the following:-   (5x3=15)
    (a) Class aggregation
    (b) Virtual function
    (c) STL libraries in C++
    (d) Namespace
    (e) Generic programming

****