END TERM EXAMINATION

THIRD SEMESTER [BCA] DECEMBER 2013

Paper Code: BCA-209   Subject: Object Oriented Programming
Using C++ (Batch 2011 onwards)

Time : 3 Hours   Maximum Marks: 75

**Note: Attempt all questions, including Q.no.1 which is compulsory.
Internal choice is indicated.**

Q1.   (2.5x10=25)

(a) Difference between C and C++

(b) Explain the features of OOPs

(c) Explain Data Hiding Concept in OOPs

(d) Give an example of new and delete operators

(e) Explain Aggregation

(f) Difference between Early binding and Late binding

(g) Difference between classification and composition

(h) What is Abstract Class explain

(i) Give an example of Template Class

(j) Give an Example of Destructor

Q 2.   (a) Explain Function Overloading with example?   (4)
       (b) Explain Constructor with example?   (4)
       (c) Explain Virtual Function with example ?   (4.5)

OR

(a)   Explain Template Function with example?   (4)
(b)   Explain Benefits of OOPs?   (4)
(c)   Explain C++ Garbage collection with example?   (4.5)

Q 3.   (a) Explain Multiple Inheritance with example?   (4)
       (b) Explain Namespaces with example?   (4)
       (c) Give an example of try and catch block   (4.5)

OR

(a) Write a short note on Default arguments and how these are use in function call?   (4)
(b) Difference between Multiple and Multilevel Inheritance with example?   (4)
(c) Example an example of Unary Operator Overloading?   (4.5)

Q4.   (a) Explain Command line arguments with example?   (4)
       (b) Explain Friend Function with example?   (4)
       (c) Explain free() and malloc() with example ?   (4.5)

OR

(a) Explain Parametric Polymorphism with example?   (4)
(b) Difference Between Overloading and Overriding functions?   (4)
(c) Explain different types of Exceptions in C++ ?   (4.5)

Q5.   (a) Discuss ambiguity in multiple Inheritance explain with example ?   (4)
       (b) what is pure virtual function explain with example?   (4)
       (c) what are the file modes / open mode bits? Explain with example?   (4.5)

OR

(a) What is generic class explain with example ?   (4)
(b) Write a short note on stream and its types?   (4)
(c) How Errors can be handled during file operations explain with example?   (4.5)