

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)
- Difference between C and C++
 - Explain the features of OOPs
 - Explain Data Hiding Concept in OOPs
 - Give an example of new and delete operators
 - Explain Aggregation
 - Difference between Early binding and Late binding
 - Difference between classification and composition
 - What is Abstract Class explain
 - Give an example of Template Class
 - Give an Example of Destructor
- Q 2.
- Explain Function Overloading with example? (4)
 - Explain Constructor with example? (4)
 - Explain Virtual Function with example ? (4.5)
- OR
- Explain Template Function with example? (4)
 - Explain Benefits of OOPs? (4)
 - Explain C++ Garbage collection with example? (4.5)
- Q 3.
- Explain Multiple Inheritance with example? (4)
 - Explain Namespaces with example? (4)
 - Give an example of try and catch block (4.5)
- OR
- Write a short note on Default arguments and how these are use in function call? (4)
 - Difference between Multiple and Multilevel Inheritance with example? (4)
 - Example an example of Unary Operator Overloading? (4.5)
- Q4.
- Explain Command line arguments with example? (4)
 - Explain Friend Function with example? (4)
 - Explain free() and malloc() with example ? (4.5)
- OR
- Explain Parametric Polymorphism with example? (4)
 - Difference Between Overloading and Overriding functions? (4)
 - Explain different types of Exceptions in C++ ? (4.5)
- Q5.
- Discuss ambiguity in multiple Inheritance explain with example ? (4)
 - what is pure virtual function explain with example? (4)
 - what are the file modes / open mode bits? Explain with example? (4.5)
- OR
- What is generic class explain with example ? (4)
 - Write a short note on stream and its types? (4)
 - How Errors can be handled during file operations explain with example? (4.5)