



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)

BCA-II 2<sup>nd</sup> YEAR 3<sup>rd</sup> SEMESTER ASSIGNMENT

*Last Date of Submission: 15 Jan., 2014*

**Course Title: Object-Oriented Programming through C++**

**Course Code: BCA-08**

**Year: 2013-14 Summer**

**Maximum Marks: 40**

**Section 'A'**

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answer 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

1. What is function overloading and operator overloading?
2. What is inline function? Explain the situations where inline expansion may not work.
3. What is the difference between realloc() and free()?
4. What is the difference between constructor overloading and function overloading?
5. Define Polymorphism. Explain the different types of polymorphism.
6. What is dynamic binding? What are the advantages of dynamic binding?
7. What is the difference between class and structure?
8. What is the difference between an ARRAY and a LIST?

**Section 'B'**

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answer 02 questions only.

1. What is a virtual function? Explain with suitable example.
2. What is the difference among private, public and protected member. Write a program in C++ to show these members.
3. What is the need of virtual function? Describe this with the help of a suitable example using C++. What is pure virtual function?
4. Illustrate the overloading of new and delete function.