BACHELOR IN COMPUTER APPLICATIONS

Term-End Examination

June, 2008

CC-16 : INTRODUCTION TO C++

Time : 2 hours   *Maximum Marks : 75*

Note : *Question number 1 is **compulsory**. Answer any **three** questions from the rest. Use C++ wherever necessary.*

1. (a) Write a program in C++ to simulate the functionality of a simple calculator to perform addition, subtraction, division, multiplication and to find percentage.   *10*

    (b) Write a program in C++ to count the number of alphabets and blank-spaces in a given string.   *10*

    (c) With the help of example program code in C++ explain the following features of OOPS :   *2×5=10*

      (i) Overloading

      (ii) Inheritance

2. (a) Write an inline function to find the largest number among three given numbers.   7

    (b) Write a program in C++ to find the difference between two metrices of size n x n.   8

3. (a) Give the syntax for the following statements of C++ along with an example for each :   8

      (i) For loop

      (ii) While loop

      (iii) GOTO

      (iv) Switch

    (b) Write a program in C++ to find the GCD (Greatest Common Divisor) of the two given numbers.   7

4. (a) With the help of a sample program segment in C++, explain the significance of array of objects.   5

    (b) Write a program in C++ to search for a given number in given list of "N" numbers. Use any of the searching techniques and explain the program logic.   10

5. Write short notes on :   5×3=15

      (i) Data Encapsulation

      (ii) I/O file streams

      (iii) Public, Private and Protected specifiers

      (iv) Increment and Decrement operators

      (v) Type Conversion