**5 2 4 7**

# B.Sc. DEGREE EXAMINATION, 2012

**(MATHEMATICS)**

( FIRST YEAR )

**( PART - III )**

**( GROUP - B : ANCILLARY )**

( PAPER - II )

**541. PROGRAMMING IN C AND C++**

*( Candidates joined during 2010-11)*

May ]                                                    [ Time : 3 Hours

Maximum : 75 Marks

*Answer any FIVE questions.*
*ALL questions carry equal marks.*

1. (a) Explain the types of functions used in C.

   (b) Explain bitwise operators in C.

**Turn Over**

2. (a) Write a C program to arrange the given *n* numbers in descending order.

   (b) What is called name equivalent structure? How do you perform the computation in nested structure? Explain

3. (a) Discuss the basic concepts of Object Oriented Programming.

   (b) Discuss the control structures in C++.

4. (a) What is function overloading? Illustrate with a program.

   (b) How do structures in C and C++ differ?

5. (a) Write short notes on:

   (i) Copy constructor

   (ii) Dynamic constructor.

   (b) Why operators are overload? Write an example program that overloads ++ operator.

6. (a) Explain friend function with a program.

   (b) Discuss the type conversion.

7. (a) Explain multiple inheritance and hybrid inheritance with example.

   (b) Discuss about 'THIS' pointer and pointers to derived classes.

8. (a) Explain the Random access file. Processing in C++ with example.

   (b) Write short notes on:

   (i) File pointers.

   (ii) Updating a file.