Exam.Code:0040 Sub. Code: 0999

### 2053

# B.Sc. (Hons.) Bio-Informatics

#### Second Semester

BIN-2007: C Language and Programming

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

X-X-X

- I. Write short answers of the following:
  - a) Differentiate between the = symbol and == symbol.
  - b) Differentiate between call by reference and call by value in C.
  - c) Explain the use of header file in C.
  - d) Differentiate between for and while, loop.
  - e) What is the use of a static variable in C?
  - f) Explain the use of fscanf() and fprintf().

(6x2)

## UNIT-I

- (a) What is an Identifier? Explain the rules to name an Identifier.
  - (b) Explain four basic types of constants in C.

(2x6)

- III. (a) Explain any three Decision making statements in C with the help of examples.
  - (b) Write a program in C that finds greatest of three numbers.

(2x6)

- IV. (a) Explain two dimensional Arrays? Also write a C program that finds transpose of a square matrix.
  - (b) How are strings handled in C? Write a C program to find the length of a String. (2x6)

## UNIT - II

- (a) Explain the use of Top down Approach of Problem solving.
  - (b) What are Library Functions in C? Explain any four Library Functions with examples. (2x6)

P.T.O.

VI. (a) What is a Recursion? Write a recursive function that returns factorial of a number N.

(b) How do you define a Structure in C? Also differentiate between a Structure and a Union.

VII. (a) What is a Pointer? Which operations can be performed on Pointers? Explain with examples.

(b) How do you create an Array of Pointers? Give examples. (2x6)

x-x-x