

2054  
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. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Write short answers of the following:-
- Differentiate between / and % operators used in C.
  - How are comments given in C language?
  - What is the difference between automatic type conversion and type casting?
  - Differentiate between prefix decrement operator and postfix decrement operator.
  - Differentiate between Structure and Array.
  - Name different modes in which a file can operate in C. (6x2)

UNIT - I

- II. (a) Explain commonly used input and Output statements used in C with examples.  
(b) Explain scalar data types used in C with suitable examples. (6,6)
- III. (a) Explain the use of switch statement in C. Write a program that accepts numbers 1 to 12 as input and displays the corresponding monthname using switch statement.  
(b) Write a program in C to check whether a number entered by user is even or odd? (6,6)
- IV. (a) Explain two dimensional Arrays? Also write a C program that adds two matrices.  
(b) How are strings created in C? Write a C program to find the reverse of a String. (6,6)

UNIT - II

- V. (a) Explain the Modular Approach of Problem solving.  
(b) How are functions defined and used in C? Write a C program to add two integers using functions. (6, 6)
- VI. (a) Explain the working of a recursive function with the help of examples.  
(b) What is a Structure? How is it declared and accessed in C? Define a structure to store information of a particular date. (6,6)
- VII. (a) Write a short note on Pointer Arithmetic. Give suitable examples.  
(b) Explain the use of fscanf(), fgets(), fprintf() and fputs() functions used in file handling in C. (6,6)

x-x-x