

Exam.Code:0040
Sub. Code: 17999

2056
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.

- i. How is source code different from object code?
- ii. Give the storage requirement of variables of float and double datatypes.
- iii. What is the purpose of `stdio.h` and `conio.h` files?
- iv. What is Sparse Matrix?
- v. Explain the role of statement 'return 0'.
- vi. Explain the scope of global and local variables. (6*2)

Unit I

- II. (a) Explain Basic input/output statements supported by C Language.
(b) Explain integer data types used in C. Write a C program to swap two numbers. (6, 6)
- III. Explain the use of looping control statements in C. Also explain the use of break and continue statements in loops. Give suitable examples. (12)
- IV. (a) Write a C program to search for an element in one-dimensional Array.
(b) Explain the use of string functions, `strlen()`, `strcpy()`, `strcat()`, `strcmp()` with examples. (6, 6)

Unit II

- V. (a) What is Modular Programming? Which feature of C language is used for modular design of a program? Give an example.
(b) Write a short note on the standard library of C. (6, 6)
- VI. (a) How do you pass arguments to a function in C? Explain different approaches with examples.
(b) What are & and * operators? Explain their usage in Pointer applications. (6, 6)
- VII. (a) What is a Structure? How is it defined, initialized and accessed? Explain with any suitable example.
(b) What is a File in C? Explain file related functions for opening, reading, writing and closing files with suitable examples. (6, 6)

x-x-x

