UN – 310

I Semester B.C.A. Degree Examination, November/December 2015
(Y2K14 Scheme) (CBCS)
COMPUTER SCIENCE
BCA 103T : Problem Solving Techniques Using 'C'

Time : 3 Hours Max. Marks : 70

Instruction : *Answer* ***all*** *Sections.*

SECTION – A

I. Answer **any ten** questions : **(10×2=20)**

1) Define algorithm.
2) Define system software.
3) What is header file ?
4) What are the rules for declaring variables in C ?
5) Give the syntax and example for If-Else statement.
6) What is the difference between break and continue ?
7) How to declare and initialize two dimensional array ?
8) Difference between Strcmp( ) and Strcmpi( ).
9) What is Mallac( ) and Calloc( ) ?
10) Give the difference between * and & in C pointer.
11) What is file pointer ?
12) What are command line arguments ?

SECTION – B

II. Answer **any five** of the following : **(5×10=50)**

13) a) Explain the structure of a C program. **4**
    b) Write an algorithm and flowchart to find largest of 3 numbers. **6**
14) a) Explain formatted input-output function in C. **5**
    b) Explain binary operators in C with examples. **5**

P.T.O

15) Write a menu driven C program using switch-case to find :

a) Sum of the digits of a number

b) Factorial of N. **10**

16) Explain different types of user-defined functions with examples. **10**

17) a) Write a C program to arrange the given set of numbers in ascending order. **4**

b) Write a program to find the product of matrices of order m × n. **6**

18 a) Explain call by value and call by reference with examples. **5**

b) Explain array of structures with an example. **5**

19) a) Explain different modes of opening a file. **5**

b) Write a C program to copy contents of one file to another. **5**

20) Write short notes on :

a) Local variable and global variable. **5**

b) While loop and Do-while loop. **5**