LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc., B.C.A. DEGREE EXAMINATION – COMPUTER SCI., APPLI.

FIRST SEMESTER – NOVEMBER 2014

CS 1503 / CA 1503 - PROGRAMMING IN C

Date : 07/11/2014   Dept. No.   Max. : 100 Marks
Time : 01:00-04:00

Part A

Answer ALL the Questions: **(10 * 2 = 20)**

1. Differentiate Constants & Variables
2. Define Conditional Expression.
3. Differentiate While and For Loop.
4. Define Array. Give its uses.
5. Define Recursion.
6. Define Scope of a Variable.
7. Give the difference between Structures & Unions.
8. Define Pointers.
9. Define Command line arguments.
10. Define Macros.

Part B

Answer ALL the Questions: **(5 * 8 = 40)**

11. Write briefly about the Basic Data Types and Operators in C.
                         (or)
    Draw a Flowchart to find the biggest of 3 numbers

12. Give any six commonly used conversion characters for Data Input with examples.
                         (or)
    Write a Program to Print this Structure.
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        ***
        **** & so on up to n.

13. Write a Program to find the factorial of a number using recursion.
                         (or)
    Discuss about any four string handling functions with examples.

14. What are the only operations that can be carried out on Pointers?
                         (or)
    Explain structures with an example program.

15. What are the various modes of Opening a File? Give all the I/O operations in files.
                         (or)
    Write a Program which prints the arguments passed from the command line.

Part C

16. (a) Define Algorithm. Explain the steps involved in Programming.
    (b) Write a Program to print the sum of the elements stored in an array of size 10.

17. (a) Define Function. Give its Uses. Explain call by value and call by reference with an example.
    (b) Explain Passing Pointers to Functions with Examples.

18. (a) Explain Dynamic Memory Allocation with examples.
     (b) Give the various control structures that is available in C.

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