LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**B.Sc.** DEGREE EXAMINATION – **COMPUTER SCIENCE**

FIRST SEMESTER – APRIL 2011

# CS 1503/CA 1503 - PROGRAMMING IN C

Date : 06-04-2011 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

**PART – A**

**Answer ALL the Questions (10 x 2 = 20 marks)**

1. Specify the symbols used in flow charts.
2. Define constants.
3. Write the syntax for Nested IF statement.
4. What is meant by Single- subscripted variable?
5. What is Recursion?
6. Define print line Functions.
7. Define union.
8. Define Pointers.
9. Write the syntax to open and close a file.
10. What is the use malloc ( )?

**PART – B**

**Answer ALL the Questions (5 x 8 = 40 marks)**

1. a) Explain in detail about Data types with example.

(Or)

b) Explain in detail about precedence of arithmetic operators with example.

1. a) Write the different types of IF structure available in C.

(Or)

b) Describe the various looping structure with suitable example.

1. a) Explain about various string handling functions with examples.

(Or)

b) Explain nesting of functions with example.

1. a) Explain about pointers in C and its advantages.

(Or)

b) Explain about arrays within the structure.

1. a) Explain about Error handling during I/O operations.

(Or)

b) Write a C program to find number of character, word, line in the given file.

**PART – C**

**Answer any TWO Questions (2 x 20 = 40 marks)**

1. a) Explain the various operators available in C with example. (10 marks)

b) Illustrate the various control structures available in C. (10 marks)

1. a) What are functions in C? Explain the types of functions with example. (10 marks)

b) Explain array concepts. Write a program to add two nxn matrices. (10 marks)

1. a) Explain the Input and output operations on files with suitable examples. (10marks)

b) Explain about the dynamic memory allocation in detail. (10 marks)

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