

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc.DEGREE EXAMINATION –COMPUTER SCIENCE

FIRST SEMESTER – APRIL 2018

CS 1503– PROGRAMMING IN C

Date: 26-04-2018
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART – A

Answer ALL the questions

(10 x 2 = 20 marks)

1. What is the importance of keywords in C.
2. What are various types of C operators?
3. What is the difference between while loop and do... while loop?
4. What are the uses of array?
5. Give an example of initialization of string array.
6. What is a Pointer? How a variable is declared to the pointer?
7. Define Recursion? Give an example.
8. What is the difference between call by value and call by reference?
9. What is dynamic memory allocation?
10. What is the use of pre-processor directives?

PART- B

Answer ALL the questions

(5 x 8 = 40 marks)

11. a. i) Discuss about the various data types in “C”. (4)
ii) What are constants? Explain the various types of constants in C. (4)
(OR)
- b. Explain in detail about various operators in C with suitable example. (8)
12. a. i) Explain the different looping statement with example? (4)
ii) Write a C program to check whether the given number is palindrome or not. (4)
(OR)
- b) What is an array? Explain the characteristics and classification of an array with examples. (8)
13. a. i) Explain in detail about string handling function with suitable examples. (4)
ii) Write a C program to reverse a String. (4)
(OR)
- b. Explain the use of passing array to functions with suitable example. (8)
14. a. What is a structure? Create a structure with data members of various types and declare two structure variables. Write a program to read data into these and print the same. (8)
(OR)
- b. Write a program to explain functions returning pointer. (8)
15. a) Explain in detail about preprocessor directives with suitable examples. (8)
(OR)
- b) Explain briefly about the malloc() and calloc() functions. (8)

PART – C

Answer any TWO questions

(2 x 20 = 40 marks)

16. a) Discuss in detail about various expressions in 'C' with suitable examples.

b) Write a 'C' program to find the Sum and difference of two matrices.

17. a) Explain in detail about the category of functions with suitable examples.

b) Explain Unions declaration, definition and union member access with suitable example.

18. a) Explain with example the Input and Output operations on files.

b) Discuss in detail the control structures with example.
