LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034



B.Sc. DEGREE EXAMINATION - COMPUTER SCIENCE

FIRST SEMESTER - NOVEMBER 2018

CS 1505- PROGRAMMING IN C

Date: 24-10-2018	Dept. No.	Max.: 100 Marks
Time: 09:00-12:00		

PART - A

Answer All the questions

(10 X 2 = 20 Marks)

- 1. What are the different data types available in "C"?
- 2. Define Flowchart. Why is flow chart required?
- 3. What is the difference between while loop and do...while loop?
- 4. Declare a float array of size 5 and assign 5 values to it
- 5. Give an example of initialization of string array.
- 6. What is a Pointer? How a variable is declared to the pointer?
- 7. Define static variable. Give an example.
- 8. What is the difference between call by value and call by reference?
- 9. What do mean by Bit fields?. Give an example.
- 10. Write down the prototype of opening and closing a data file?

PART-B

Answer All the questions

(5 X 8 = 40 Marks)

- 11. a. Discuss about the various types of operators in "C" with suitable examples. (8)
 - (OR)
 - b. Draw a Flow chart to find factorial of a number.

(8)

(8)

12.a. Explain in detail about various control structures in C with example?

(OR)

- b. What is an array? Explain the characteristics and Classification of an array with examples.(8)
- 13.a. Explain in detail about string handling function with suitable examples. (8)

(OR)

b. Write a C program to find the Sum and difference of two matrices. (8)

14. a. Explain in detail about storage classes with suitable examples. (8)

(OR)

b. Write a program to print student grade using structure.

(8)

15. a. Explain in detail about preprocessor directives with suitable examples.

(8)

(OR)

b. Explain in detail about various file handling functions in C with suitable examples.

(8)

PART-C

Answer Any TWO questions

 $(2 \times 20 = 40 \text{ Marks})$

- 16. a) Explain briefly about the formatted and unformatted I/O function in C with suitable examples.
 - b) Write a C program to sum of digits of an integer.
- 17. a) Explain in detail about dynamic memory allocation with suitable examples.
 - b). Write a program to calculate average of n numbers using array.
- 18. a) Explain the concept of structure within structure with suitable program.
- b) Define a structure called book with book name, author name and price. Write a C program to read the details of book name, author name and price of 200 books in a library and display the total cost of the books and book details whose price is above Rs.500.

