LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIRST SEMESTER – **NOVEMBER 2018**

CS 1503– PROGRAMMING IN C

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

PART – A

Answer all the questions: (10x2=20)

1. List any four numeric functions.

2. What is recursive function?

3. What is flow chart?

4. What does the control string of scan function contain?

5. List the unconditional control statement.

6. What is the significance of static variable?

7. What are the different opening modes of the file?

8. What is a function pointer?

9. What is user defined data type?

10. What is the advantage of using a file?

PART – B

Answer ALL the questions: (5x8=40)

11. a) How values are passed between functions?

(or)

b) Explain about different storage classes.

12. a) Write a C program to print all prime numbers from 1 to 100.

(or)

b) Write a C program to find whether a given string is a palindrome or not.

13. a) Write an algorithm to find the digit sum of a positive integer number.

(or)

b) Explain about different data types of C.

14. a) What is union data type? How does it differ from struct data type? Give an example where the union data type can be used.

(or)

b) What is pointer arithmetic? Explain with suitable illustrations.

15. a) Explain about file input and output functions for text files.

(or)

b) Write short notes on the following file functions.

1. fread   2. fwrite   3. fseek   4. ftell

PART – C

Answer any two questions: **(2x20=40)**

16. a) Explain about hierarchy of operations in C.   **(10)**

b) Explain about the different looping statements in C.   **(10)**

17. a) Write a function which receives the year as a parameter and returns 1 if the year isa leap year or Zero otherwise.   **(10)**

b) Write a program to read the name, age (in completed years) sex and height of n persons and find the names of oldest male and oldest female (use structures).

(10)

18) a) Explain with example how arrays can be passed as arguments in function.

(10)

b) Write a C program to copy the content of one file to another file.   **(10)**

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