LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034		
B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE		
7 1 1 5	FIRST SEMESTER – NOVEMBER 2017	
CS 1503 – PROGRAMMING IN C		
Date: 14-11-2017 Time: 01:00-04:00	Dept. No.	Max. : 100 Marks
PART A		
ANSWER ALL THE QUESTIONS: $(10 \times 2 = 20)$		
1. What is an algorithm?		
2. Define symbolic constants.		
3. What is the use of goto statement?		
4. Write short notes on ternary operator(?:) .		
5. Define functions.		
6. What is the function used for reading a string?		
7. What is bit fields?		
8. Define recursion.		
9. What are the types of file streams?		
10. What is the statement used for releasing used space?free		
PART B		
ANSWER ALL THE QUESTIONS:		(5 X 8 = 40)
11. a) Explain the steps involved in computer programming.		
(Or)		
b) Explain the various operators used in C.		
12. a) What is the syntax of the while loop? Draw the control diagram of the while		
loop. Is the while a top-tested or a bottom-tested loop?		
(Or)		
b) Explain in detail about various if statements with an example		
13 a) Explain String handling functions with an example		

(Or)

b) Explain the category of functions.

14. a) Distinguish between structures and union.

(Or)

b) Explain in detail about pointers to functions with an example.

15. a) Explain various File operations in C with an example.

(Or)

b) Explain command line argument with an example.

PART C

ANSWER ANY TWO QUESTIONS:

(2 X 20 = 40)

16. a) Explain in detail about variables and data types with an example.

b) Discuss about the decision making statements in detail.

17 a) Explain the scope, visibility and lifetime of variable.

b) Write a C program to find out the largest and smallest element in an array.

18. a) Explain in detail about arrays of structures.

b) Describe about the dynamic memory allocation.
