# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

B.Sc. DEGREE EXAMINATION - COMPUTER SCIENCE

FIRSTSEMESTER – APRIL 2017

### CS 1505- PROGRAMMING IN C

Date: 26-04-2017 Time: 09:00-12:00 Dept. No.

Max.: 100 Marks

#### SECTION-A

# ANSWER ALL THE QUESTIONS:

- 1. What are the functions of input unit and output unit?
- 2. Draw the flow chart to find the biggest of two numbers.
- 3. Why is it necessary to give the size of an array in an array declaration?
- 4. Write the syntax for if-else statement.
- 5. Write a C Program to length of the string.
- 6. What is the difference between an array and pointer?
- 7. How do you use a pointer to a function?
- 8. Differentiate fixed argument functions and variable argument functions.
- 9. Define structure declaration.
- 10. Write the syntax of pointers to structures.

#### **SECTION-B**

## ANSWER ALL THE QUESTIONS:

11. a. Explain briefly about the formatted and unformatted I/O function in C

## (Or)

b. Explain various operators in c with example?

12. a. Explain about the various decision making statements in "C" language.

### **(Or)**

b. What is an array? Explain the characteristics and Classification of an array with examples.

13. a . Explain various String operations. Write a C Program to find length of a String without using Library functions.

## (Or)

b. Write in detail about pointer arithmetic. Support your answer with suitable examples.

14.a. What is a function in C. Discuss about the concept of call by value and call by reference with examples?

### (Or)

b. What is recursion? Explain recursion with suitable example. What are the advantages of using recursion? Demonstrate with examples.

15.a. Write a C program to create a mark sheet for students using structure

## (Or)

b. (i)Write a simple program to read the numbers from the file and display the numbers. (ii)Differentiate between random access and sequential access file.

## (10\*2=20 marks)

(5 X 8 = 40 marks)

## SECTION-C

## ANSWER ANY TWO QUESTIONS:

16. a.(i)Write an Algorithm and flowchart to stimulate railway ticket booking process

(ii) Draw a Flow chart to find sum of first 100 natural numbers.

- b. (i) write a C program to find the largest and smallest element in an array.
- (ii) Write a C program to search a given number in an array of elements.
- 17.a. Write a C program to generate "Calculator.
- b. What is a pointer? Explain about Pointer to Pointers with an example.
- 18. a. Explain about file manipulations in detail with suitable program.
- b. Explain the different looping statement with example?

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