LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034



B.Sc. DEGREE EXAMINATION - COMPUTER SCIENCE

FIRST SEMESTER - NOVEMBER 2015

CS 1505 - PROGRAMMING IN C

Date: 04/11/2015	Dept. No.	Max.: 100 Marks
Time $\cdot 0.1 \cdot 0.0 - 0.4 \cdot 0.0$		

PART - A

ANSWER ALL THE QUESTIONS:

 $(10 \times 2 = 20 \text{ Marks})$

- 1. Define Algorithm.
- 2. What are the different data types available in 'C'?
- 3. What is the difference between while loop and do...while loop?
- 4. What is the output of the following C program?

```
Main()
{ int a[]={7,5,10,12,6],*p;
P=&a[0];
Printf(%d",*(p+2);
}
```

- 5. What is an Array? Mention its types and write how to declare an array.
- 6. What is a pointer?
- 7. What are the advantages of the functions?
- 8. What is a recursive function?
- 9. How will you create a structure variable?
- 10. What is a File?

PART - B

ANSWER ALL THE QUESTIONS:

 $(5 \times 8 = 40 \text{ Marks})$

11. a) Write the algorithm and Draw the flowchart for finding largest of three numbers.

(Or)

- b) Write an algorithm to accept temperature in degree Celsius and convert it in to Fahrenheit.
- 12. a) Explain about various control structures with suitable example.

(Or)

- b) Write a Source Code to Calculate Average Using Arrays.
- 13. a) Explain about how pointers are used with arrays.

(Or)

- b) List down the functions that manipulate null-terminated strings.
- 14. a) Discuss about various categories of functions with suitable example.

(Or)

- b) Write a function to sort the characters of the string passed to it as argument.
- 15. a) List and explain about any five file functions.

(Or)

b) Explain about Command line arguments?

PART - C

ANSWER ANY TWO QUESTIONS:

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

- 16. a) Discuss about the basic structure of a C program. Give an example.
 - b) List down the common escape sequences with examples in C Programming.
- 17. a) Discuss about various categories of functions with suitable example.
 - b) What are conversion specifiers with examples?
- 18. a) Write a program that appends one file at the end of another.
 - b) What is the need for operating on bits? Discuss the bit manipulation facilities in C.

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