



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FIRST SEMESTER – NOVEMBER 2016

CA 1505 - PROGRAMMING IN C

Date: 05-11-2016
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART - A

Answer All Questions

(10 * 2 = 20)

1. What is the purpose of a System software? List some of the system softwares.
2. What are the properties of a good structured programming?
3. What is typedef?
4. What is a ternary operator?
5. Define String.
6. Write the C code to declare an array variable to store the maximum and minimum temperature of 5 cities for 3 states in India.
7. List any four mathematical functions available in C.
8. What are the two ways of passing parameters to a function?
9. Compare Structures and Unions.
10. What is a Command line Argument?

PART - B

Answer All Questions

(5 * 8 = 40)

11. a) What is a flowchart? Draw a flowchart to find the average of n numbers. Explain the notations used.
(OR)
b) Discuss about the steps involved in writing a program.
12. a) Explain the basic data types available in C.
(OR)
b) Discuss about the relational and logical operators in C with examples
13. a) Define Arrays. Explain the creation and processing of one dimensional arrays with an example.
(OR)
b) Explain any four string handling functions with suitable examples.
14. a) What is the purpose of a Storage class? Explain the storage classes available in C.
(OR)
b) What is Recursion? Write a recursive function in C to print the Fibonacci series.
15. a) What is a Structure? Explain how to create and initialize structure variables.
(OR)
b) Discuss about Enumerated Data Types with suitable example.

PART - C

Answer Any Two Questions

(2 * 20 = 40)

16. a) Define Algorithm. What are its properties? Design an algorithm to display the prime numbers between 1 and n.
b) Explain the looping statements available in C.
17. a) What are multi-dimensional arrays? Write a program to add two matrices and explain the concept of multi-dimensional arrays.
b) Discuss about user-defined functions.
18. a) Write a program to create an array of Student structures with the fields student name, register number and total marks. Find the student who has obtained the highest total mark.
b) Discuss about the different forms of if..else statement with suitable examples.
