LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FIRST SEMESTER – APRIL 2017

CA 1505- PROGRAMMING IN C

Date: 26-04-2017   Dept. No.   Max. : 100 Marks
Time:09:00-12:00

PART - A (10 * 2 = 20)
Answer All Questions

1. What is a Preprocessor?
2. List the steps involved in writing a program.
3. What are the types of constants?
4. What is the difference between break and continue statements?
5. Define Array.
6. Write the C code to declare and initialize an array of strings.
7. What is scope and lifetime of a variable?
8. List any four built-in mathematical functions available in C.
9. Define Union.
10. What are Enumerated Data Types?

PART - B (5 * 8 = 40)
Answer All Questions

11. a) Draw a flowchart for generating Prime numbers and explain the flowchart and the notations used.

(OR)

b) What is a recursive algorithm? Write the pseudocode for finding the factorial of a number.

12. a) Discuss about the data types available in C.

(OR)

b) Discuss about if statements with suitable examples.

13. a) Write a program to find the largest number in an array of 'n' numbers.

(OR)

b) Write notes on :getchar(), putchar(), gets(), puts() and getch()

14. a) Explain the storage classes available in C.

(OR)

b) How are user-defined functions created and accessed? Explain with a suitable example.

15. a) What is a Structure? Explain how to create structures within structures with an example.

(OR)

b) Discuss about Command Line Arguments with suitable example.

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16. a) What is an Algorithm? Write an algorithm to compute the roots of a Quadratic equation.

    b) Explain the categories of operators available in C.

17. a) Explain how to create, initialize and process two dimensional arrays with an example.

    b) Explain in detail with example passing by value and passing by reference.

18. a) Write a program to create an array of Employee structures with the fields: employee name,

    employee id, and salary. Display the employees whose salary is greater than 10000.

    b) Discuss about the looping statements in C with suitable examples.

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