LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034
B.Sc. DEGREE EXAMINATION – **COMPUTER SCIENCE**
FIRST SEMESTER – **NOVEMBER 2017**
CS 1505 – PROGRAMMING IN C

Date: 04-11-2017   Dept. No. [   ]   Max. : 100 Marks
Time: 01:00-04:00

PART - A (10 * 2 = 20)

Answer All Questions

1. List the basic data types available in C.
2. What is a constant? How is it declared?
3. Compare break and continue statements.
4. What are the different ways of initializing 1-D arrays?
5. How will you initialize a string?
6. Give the program statement to obtain the following concatenated string from the given strings:
       Given Strings: string1 = "Hello"   string2="Sir" string3="how are you?"
       Expected Concatenated string: "Hello Sir How are you?"
7. What is a function prototype?
8. List any four library functions in C.
9. What is an Enumerated data type?
10. Define Union.

PART - B (5 * 8 = 40)

Answer All Questions

11. a) Define Flowchart? Draw a flowchart to find the largest of 'n' numbers and explain the notations used.
(OR)
b) Discuss about printf() and scanf() functions.
12. a) Explain the entry-controlled looping statements with examples.
(OR)
b) Write a C program to add two matrices A and B and store it in matrix C. Print all three matrices.
13. a) What is a Pointer? Explain how pointers are used to store values in arrays and access them.
(OR)
b) What is a String? How are strings created without using String functions?
14. a) Explain the ways of passing parameters to functions with suitable examples.
(OR)
b) What is Recursion? Write a recursive function in C to calculate the factorial of a number.
15. a) Explain how to declare, initialize and use structures in C with an example.
(OR)
b) Discuss about Command Line Arguments.

Answer Any Two Questions   **PART - C (2 * 20 = 40)**

16. a) Design an algorithm to search for a particular element in an array and print the result.
    b) Explain the multi-way selection statements available in C with suitable example.
17. a) Discuss about String Handling Functions with examples.
    b) Discuss about Storage classes available in C with example.
18. a) What is a File? Write a program to create a text file and print its contents in uppercase. Explain the
       file functions used in the program.
    b) Discuss about the categories of user-defined functions.

****