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Name.....

Reg. No.....

**FIRST SEMESTER M.A./M.Sc./M.Com. DEGREE EXAMINATION
DECEMBER 2019**

(CBCSS)

Computer Science

CSS 1C 04—THE ART OF PROGRAMMING METHODOLOGY

(2019 Admissions)

Time : Three Hours

Maximum : 30 Weightage

I. Short Answer Type Questions. Answer any *four* questions :

- 1 Define flow chart ? Explain different flow chart symbols.
- 2 List the different characteristics of C language.
- 3 What is conditional operator ? Explain with an example.
- 4 Distinguish between break and continue statement.
- 5 What are enumeration variables ? How are they declared ?
- 6 Explain the use of pointers.
- 7 What is Macros ? Explain with an example.

(4 × 2 = 8 weightage)

II. Short Essay or Problem Solving Type. Answer any *four* questions :

- 8 What do you mean by command line arguments ? Write a program to find the sum and average of n numbers using command line arguments.
- 9 Write a program to insert a new integer into a sorted integer array.
- 10 Develop a C program to replace all occurrences of a particular letter by another letter in a given string. (Eg : replace all occurrences of 'a' in a string by 'z').
- 11 Write program to sort the digits of a given integer number. (Eg : Input : 67584, output : 45678)
- 12 Write a program to sort n strings in ascending order using pointers.
- 13 Write a program to sort elements of given $m \times n$ matrix of integers in descending order, row-by-row.
- 14 Explain different looping structure in C with examples.

(4 × 3 = 12 weightage)

Turn over

III. Long Essay Type Questions. Answer any *two* questions :

- 15 Explain in detail various branching statements, with examples.
- 16 Two files DATA1 and DATA2 contain sorted lists of integers. Develop a program to produce a third file DATA which holds a single sorted, merged list of these two lists. Use command line arguments to specify the file names.
- 17 Explain different storage class specifiers with example.
- 18 Given two one-dimensional arrays A and B which are sorted in ascending order. Write program to merge them into a single sorted array C that contains every item from arrays A and B, in ascending order.

(2 × 5 = 10 weightage)