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 ofgiven *m* × *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 specifies 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)