Name

Reg. No.

# FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2015

# (CUCSS)

### **Computer Science**

### CSS 1C 04 - THE ART OF PROGRAMMING METHODOLOGY

### (2014 Admission onwards)

Time : Three Hours

Maximum : 36 Weightage

### Part A

# Answer all questions. Each question carries 1 weightage.

- 1. What are the two categories of flowchart?
- 2. Differentiate between compiler and interpreter.
- 3. Describe the base structure of a C program.
- 4. What are the qualifiers that an *int* can have at a time ?
- 5. Mention the decision making and branching statements in C.
- 6. Write any two string manipulation function and explain.
- 7. Explain multidimensional array.
- 8. What are actual and formal arguments.
- 9. Differentiate between structure and union.
- 10. Name the storage classes in C.
- 11. What is the significance of EOF?
- 12. Explain command line arguments.

(12 x 1 = 12 weightage)

#### Part B

# Answer any six questions. Each question carries 2 weightage.

- 13. Explain to-down design approach.
- 14. Draw the flowchart to find the largest of n numbers.
- 15. Explain any two user defined data types in C.

Turn over

- 16. Explain conditional operator. Write a program to find the largest of 3 numbers using conditional operator.
- 17. Explain goto statement.
- 18. Write a program to print first 100 prime numbers.
- 19. What is a structure in C? How structure is declared?
- 20. Explain error handing during File 110 operation.
- 21. Write a nested macro that gives the minimum of three values.

 $(6 \times 2 = 12 \text{ weightage})$ 

#### Part C

# Answer any three questions. Each question carries 4 weightage.

- 22. Explain the standard symbols used in the flowchart with neat diagrams.
- 23. Explain different relational, logical and assignment operators in C.
- 24. Explain switch-case statement with example.
- 25. Write a C program to demonstrate recursion. Explain the working with test data.
- 26. Explain different category of user detained functions.
- 27. Write a program that reads a file containing integers and appends at its end the sum of all the integers.

 $(3 \times 4 = 12 \text{ weightage})$