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# MCA DEGREE I SEMESTER EXAMINATION NOVEMBER 2014 

## CAS 2103 PROGRAMMING IN C <br> (Supplementary)

Time: 3 Hours
Maximum Marks: 50

## PART A <br> (Answer $\boldsymbol{A L L}$ questions)

I. (a) What are the various data types available in C?
(b) What is meant by symbolic constant?
(c) What are the rules to be followed for declaring a variables in C ?
II. (a) What are the bit wise operators in C? Explain its usage?
(b) What is the difference between 'Break' and 'Continue' statements in C?
(c) What are the various looping structures available in C ?
III. (a) What are the various methods to invoke the functions in C ?
(b) Write a note on C Pre-processors.
(c) What is meant by the function prototype?
IV. (a) What are the applications of 'Unions'?
(b) Write a note on enumerated data types.
(c) What are the arithmetic operations in pointers?
V. (a) What are the various operational modes in file management in C?
(b) What is the difference between fgetc 0 and fgets()?
(c) How will you get the present position of file pointer in a file?

PART B

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(5 \times 4=20)
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VI. Write a program in C to find the roots of a quadratic equation.

OR
VII. Write a program in C to print the ratio between no. of boys and girls in a class.
VIII. Write a program in C to find the largest and second largest number in a given set of numbers without using an array.

OR
IX. Write a program to find the GCD of two numbers given as input.
X. Write a C function to find the number of zeros in a matrix passed as argument.

## OR

XI. Write a C function to find the LCM of two numbers passed as arguments.
XII. Write a C program to prepare a rank list using array of structures, which contain roll number, name, marks of three subjects and total mark.

OR
XIII. What are the differences between 'Unions' and 'Structures'?
XIV. Write a program to create a file which store the clno, name, marks of three subjects and total in a file.

OR
XV. Write a program to merge the contents of two files which contain numbers in sorted order, into a single file.

