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MCA DEGREE I SEMESTER EXAMINATION NOVEMBER 2014

CAS 2103 PROGRAMMING IN C

(Supplementary)

Time: 3 Hours

Maximum Marks: 50

PART A

(Answer ALL questions)

 $(15 \times 2 = 30)$

- 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 () and fgets()?
 - (c) How will you get the present position of file pointer in a file?

PART B

 $(5 \times 4 = 20)$

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.