Subject: Introduction to Programming
Language Using C

Paper Code: BCA105

## **END TERM EXAMINATION**

FIRST SEMESTER [BCA] DEC.2014 - JAN.2015

Time: 3 Hours Maximum Marks:75 Note: Attempt five questions including Q.no. 1 which is compulsory. Select one question from each unit. Q1 (a) What are logical and relational operators? (b) Differentiate between pre-increment and post-increment operator. (c) What is ternary operator? Explain. (d) What is an array of pointers? (e) Differentiate between structure and union. (f) What are pre-processor directives? (g) What are static variables? (h) What is enum datatype? (i) Write any two functions of conio.h. (j) Explain bitwise operators. (2.5x10=25)UNIT-I Q2 (a) Write a program to generate the following output loop structure:-(6.5)\*\* (b) Differentiate between getchar(), getch() and getche(). (6) (a) Write a program to input and compare three integers and print the maximum and Q3 minimum of the three. (b) Write a program to generate Fibonacci series upto first 20 numbers. (6) UNIT-II Q4 (a) Explain the difference between call by value and call by reference with an example. (6.5) (b) Write a program using array to read the integers and find the maximum and minimum of them. Q5 (a) What are storage classes in C? Explain. (6.5)(b) Write a program to multiply two matrices. (6)UNIT-III Q6 (a) Write a program to declare any enumeration data type and display its integer values on screen. (b) Write a 'C' program to demonstrate the declaration of structures within structures and arrays within structures. (a) Write a 'C' program to demonstrate the declaration of structures as function Q7 parameters. Write a 'C' program that reads a line of text from a data file character by character and display the text on the screen. (5)(c) Differentiate between binary and text files. (2.5)08 (a) Write a program in C that writes records of five employees in employees in employee.dat. file. (b) Write 'C' program that uses at least two functions from given standard libraries: string.h and stdio.h. (6.5)09 Write format of the following library functions with example:-(12.5)fabs(), getch(), labs(), sqrt(), ceil(), pow(), calloc(), getchar(), scanf(), rand()