

# END TERM EXAMINATION

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

Paper Code: BCA105 Subject: Introduction to Programming Language Using C

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)
- Q3 (a) Write a program to input and compare three integers and print the maximum and minimum of the three. (6.5)  
 (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. (6)
- 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. (6.5)  
 (b) Write a 'C' program to demonstrate the declaration of structures within structures and arrays within structures. (6)
- Q7 (a) Write a 'C' program to demonstrate the declaration of structures as function parameters. (5)  
 (b) 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)

### UNIT-IV

- Q8 (a) Write a program in C that writes records of five employees in employees in employee.dat. file. (6)  
 (b) Write 'C' program that uses at least two functions from given standard libraries: string.h and stdio.h. (6.5)
- Q9 Write format of the following library functions with example:- (12.5)  
 fabs(), getch(), labs(), sqrt(), ceil(), pow(), calloc(), getchar(), scanf(), rand()  
 \*\*\*\*\*

P