Ajay Kumar Garg Engineering College, Ghaziabad

Department of CSE

Sessional Test-2

Course: B.Tech
Session: 2017-18
Subject: Computer System & Programming in C
Max Marks: 50

Semester: Ist
Section: ME-1,2,3, CE-1,2, EC-1,2,3
Sub. Code: RCS-101
Time: 2 hour

Note : Answer all the Sections.

Section-A

A. Attempt **all** the parts.   (5 X 2 = 10)
   (1) Differentiate between break and continue statement.
   (2) Differentiate between while and do-while loop.
   (3) What is operator precedence and operator associativity.
   (4) WAP to print all the multiples of 7 between 1 to 100.
   (5) Find the output of the following program:

```
int a;
for( a=1 ; a<=5 ; a++);
{
    printf( "%d" , a);
}
```

Section-B

B. Attempt **all** the parts.   (5 X 5 = 25)
   (6) Explain different fundamental data types in terms size, range and format specifiers.
   (7) Define recursive function. WAP to print the factorial of a given number using recursion.
   (8) What is storage class? Explain different types of storage classes.
   (9) What is a function? Explain different ways of passing values to a function with example.
   (10) WAP to calculate the sum of the following series: (take value of x from user)

$$x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \frac{x^5}{5} - \frac{x^6}{6} \ldots \ldots \ldots + \frac{x^n}{n}$$

Section-C

C. Attempt **all** the parts.   (2 X 7.5 = 15)

   (11) Explain different types of operators in detail with suitable example.
   (12) (a) WAP to convert a binary number into decimal number using function. [4]
        (b) WAP to print the following pattern: [3.5]

```
5
5    4
5    4    3
5    4    3    2
5    4    3    2    1
```