## Green University of Bangladesh Department of Computer Science and Engineering CSE 103: Structured Programming, Batch: PC-213 DA

Total Marks: 15 Class Test Examination - 2 Time: 30 Minutes

## Answer all the questions.

1. The GCD of two positive integers is the largest positive integer that divides both numbers without remainder, and LCM of two integers is the smallest integer that is a multiple of both numbers. Write a C program that takes two numbers as input and finds the GCD and LCM of those numbers.

Sample input	Sample output
12 16	GCD=4
	LCM=48
15 18	GCD = 3
	LCM = 90

2. Write a C program to swap first and last digits of a number.

[CO1] 3

Sample input Sample output 12345 52341

3. The Fibonacci sequence is a sequence where the next term is the sum of the previous two terms. The first two terms of the Fibonacci sequence are 0 followed by 1. Write a C program that takes N as input and print N terms of Fibonacci series.

Sample input	Sample output				
N=5	0 1 1 2 3				
N=7	0 1 1 2 3 5 8				
N=9	0 1 1 2 3 5 8 13 21				

4. Write a C program to print a pyramid as follows of N rows, where N should be taken as input from the keyboard. [CO1] 3

Sample input	Sample output				
N=4	4				
	4	3			
	4	3	2		
	4	3	2	1	