

National University of Computer and Emerging Sciences, Lahore Campus



Course:	Computer Organization and Assembly Language	Course Code:	EE213
Program:	BS (Computer Science)	Semester:	Fall 21
Duration:	40 Minutes	Total Marks:	10
Paper Date:	10-Nov-2021	Weight	5%
Section:	ALL	Page(s):	2
Exam:	Quiz 1	Roll No:	

- Instruction/Notes:**
- Write down your name and roll number.
 - Properly comment your code.
 - Write your answer in the space provided. You **can take extra sheets BUT they WONT BE ATTACHED WITH THE QUESTION PAPER NOT MARKED.**

Question 1: (1 + 1 + 1 marks)

Replace the following invalid instructions with a single instruction that has the same effect.

- pop ip
- sub sp, 2
mov [ss:sp], ax
- mov ax, [ss:sp]
add sp, 2

Question 2: (7marks)

Write a program that calculates the n term of Fibonacci series using loop. Store number of terms(n) to generate Fibonacci in **AX** register, save the value of series in memory, declare an array of **dw** size with name '**mySeries**' and store values in it. (Note: Don't rush at it, consider all potential conditions)

Hint:

The Fibonacci sequence is the series of numbers:

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, ...

The next number is found by adding up the two numbers before it.

- The 2 is found by adding the two numbers before it (1+1)
- Similarly, the 3 is found by adding the two numbers before it (1+2),
- And the 5 is (2+3),
- and so on!

Then store your

