

National University of Computer and Emerging Sciences, Lahore Campus



Course:	Computer Org & Assembly Lang Lab	Course Code:	EL213
Program:	BS(Computer Science)	Semester:	Fall 2018
Duration:	30 Minutes	Total Marks:	10
Paper Date:	7-Dec-18	Weight	5%
Section:	C	Page(s):	1
Exam:	Quiz-2		

Instruction/Notes: Understanding the question statement is a part of your quiz.
Plagiarism in any form shall not be tolerated.
Add comments for better understanding.

Question 1:

Consider a character array where every character is stored in one byte along with its attribute in the prior byte. As soon as F10 is pressed, the array is displayed at the top row of the screen with the same attributes as suggested by array. When F10 is released, array is displayed again but this time the background colors and foreground colors are swapped.

Similarly, when F11 is pressed, you have to display that array at the bottom row of the screen with the same attributes as the attribute byte in the array suggests. But as soon as F11 is released, the array should be displayed with swapped foreground and background colors at the bottom row.

You are not allowed to use any extra data memory. The blink and intensity bits should remain as it is in every case.

Array Representation is as follows: (AB stands for attribute byte, C stands for character).

`/AB-0/C-0/ /AB-1/C-1/ /AB-2/C-2/ /AB-3/C-3//`

For example: Array: `db 0x07,'h', 0x21,'e', 0x01,'l', 0x07, 'l', 0x01,'o'`

Size: `dw 5`