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:	5-Dec-18	**Weight**	5%
Section:	R	**Page(s):**	1
Exam:	Quiz-2		

Instruction/Notes:

Question 1:

You have to write a TSR which will clear the video memory and then display your roll number on to the video screen after each four seconds according to the following conditions:

- If 'on' is typed, your roll_no will be displayed at the top left corner
- If 'of' is typed, your roll_no will be displayed at the bottom left corner
- If both 'on' and 'of' are written by keyboard, your roll_no will be displayed at the top left corner and the bottom left corner
- If neither 'on' nor 'of' is typed, you have to display a message 'Please give correct input' at the bottom left corner and top left corner of the screen
- The above conditions will be checked after each four seconds and the previous displays will be cleared before displaying any new strings according to the aforementioned conditions

You can use data labels to declare strings as well as their corresponding lengths or any other labels you deem suitable to implement the task. You have to take care of the condition if a key is kept pressed for a long time.

Hint: You may want to look for the release code rather than press code.

Press Scan Codes for characters:

'o' -> 0x18

'n' -> 0x31

'f' -> 0x21