

CSE 331L / EEE 332L: Microprocessor Interfacing & Embedded System

Section: 7, Summer 2021

Quiz - 01

Marks: 10

Time: 20 mins

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Q1. What do you understand by the instruction **int 21h**? (1)

Ans: int 21h is used to call DOS function. It requests processor to execute a special function.

Q2. Write instructions (not complete program) to read a character, and display it at the next position on the next line. (5)

Ans:

; INPUT

MOV AH, 1H ;single-key input function

INT 21H

MOV BL, AL ;copies content of AL to BL, so the input is in AL and BL now

;printing new line

MOV AH, 2H ; single-key output function

MOV DL, 0AH ; prints new line

INT 21H

MOV DL, BL ; prints given input

INT 21H

Q3. Identify which of the following instructions are valid. If they are not valid, mention the reason. (4)

a) MOV ES, AX

b) MOV DS, @DATA

- c) ADD ARRAY[0], ARRAY[1]
- d) LEA DL, ARRAY

Ans:

- a) Valid
- b) Invalid – Data/immediate value cannot be transferred/load to the segment register.
- c) Invalid – memory to memory direct operation cannot be performed.
- d) Invalid – It should be LEA DX, ARRAY, as source is a memory location. It copies the source offset address to the destination. DL in destination can hold only 8 bit, but 16 bit is needed for storing the source offset address.