

Assembly language and Microprocessors

Quiz 2 B

الاسم:

الرقم الجامعي:

Understand the following code sections and insert the missing instruction or instructions in order to accomplish the required task.

- 1) Add the decimal numbers 71 and 43

```
MOV AL,71H  
ADD AL,43H
```

DAA

- 2) Add the two ASCII numbers 6, 7

SUB AH, AH.

```
MOV AL,'6'  
ADD AL, '7'
```

AAA

```
OR AL,30H
```

- 3) convert the ASCII of the number 15 into BCD

```
MOV BX, 3135H  
AND BX, 0F0FH
```

- 4) Clear bits 0, 1, and 4 in the byte sized memory location VAR1

AND VAR1, ECH

- 5) Multiply the contents of the CX register by 12 without using the MUL instruction

```
MOV CX, 34
```

SHL DX, 2

MOV AX, DX.

SHL DX, 1

```
ADD AX, CX
```

If CX contains 1101011100011001 as shown in fig then the result of the instruction
ROL CX,5 is

C	-----	CX	-----													
1	1	1	0	1	0	1	1	1	0	0	0	1	1	0	0	1
C	-----	CX	-----													
0	1	1	1	0	0	0	1	1	0	0	1	1	1	0	1	0