This quiz has been regraded; your score was affected.

Midterm Exam

Due Oct 12 at 2:30pm **Points** 100 **Questions** 25
Available Oct 12 at 1:30pm - Oct 12 at 11:59pm 10 hours and 29 minutes **Time Limit** 60 Minutes
Requires Respondus LockDown Browser

Instructions

Midterm Exam

HOW TO ANSWER FILL-IN-THE-BLANK QUESTIONS

In order to get full credit, please follow the following instructions:

1. Use this format for your assembly language statement: mov ax,0FFFFh
2. Use the possible radix values where needed: 10001000b, FFFFh, 6745o...
3. Use lower-case letters for the assembly instructions and registers: mov ax,0FFFFh
4. Do not use a space between the comma and the source operand: ax,0FFFFh
5. Use upper-case letters for the hexadecimal numbers: FFFFh, ABCDh
6. Use spaces to separate your input that requires multiple values: AND 1002Fh 1000h FFFFh 1234h

Please reach out to your instructor with any questions that you may have during the exam.

This quiz was locked Oct 12 at 11:59pm.

Attempt History

	Attempt	Time	Score	Regraded
LATEST	Attempt 1	60 minutes	70 out of 100	73 out of 100

Correct answers are hidden.

Score for this quiz: **73** out of 100
Submitted Oct 12 at 2:31pm
This attempt took 60 minutes.

Incorrect

Question 1

0 / 3 pts

The 2's complement representation of −150 is _____.

- F0A6h
- F096h
- FFA6h
- FF96h

Question 2

3 / 3 pts

What is the result of the following binary subtraction?

10101000b - 00101110b

- 11111000b
- 11111100b
- 01111010b
- 01111101b

Question 3

3 / 3 pts

The decimal value of ECh is _____.

- 12
- 20
- -80
- -20

Question 4

2 / 2 pts

The following instructions set the Overflow flag:
mov al,-132
add al,10

- (●) True
- ( ) False

Question 5

2 / 2 pts

The following instructions set the Overflow flag:
mov al,130
sub al,3

- (●) True
- ( ) False

Incorrect

Question 6

0 / 2 pts

The following instructions set the Overflow flag:
mov al,80h
add al,10h

- (●) True
- ( ) False

Question 7

2 / 2 pts

The following instructions set the Carry flag:
mov al,10h
sub al,12h

- (●) True
- ( ) False

Question 8

5 / 5 pts

What will be the hexadecimal value in EDX after the following lines execute? Use the 32-bit hexadecimal value for your answer.

.data

num word 9000h

.code

mov edx,21348041h

movzx edx,num

00009000h

Question 9

5 / 5 pts

What will be the hexadecimal value in EAX after the following lines execute? Use the 32-bit hexadecimal value for your answer.

mov eax,1002FFFFh
inc ax

10020000h

Incorrect

Question 10

5 / 5 pts

What will be the hexadecimal value in EDX after this code is executed?

```
mov edx,1
mov eax,8000h
cmp eax,7FFFh
jl  L1
mov edx,0
L1:
```

00000000h

Question 11

5 / 5 pts

What will be the hexadecimal value in EAX after this code is executed? Use the 32-bit hexadecimal value for your answer.

```
.data
arr  byte   10h,20h,30h,40h,50h,60h,70h,80h

.code
mov eax, dword ptr arr
inc ax
```

40302011h

Question 12

3 / 3 pts

```
.data
arr  byte   10h,20h,30h,40h,50h,60h,70h,80h
```

The following statement moves the last four bytes of arr to the EBX register:

- mov ebx,type dword arr+4
- mov ebx,dword ptr arr+4

- mov ebx,byte ptr arr
- mov ebx,word ptr arr

Question 13

2 / 2 pts

If a bit is in the set, the zero flag is clear.

- (selected) True
- False

Incorrect

Question 14

Original Score: 0 / 3 pts Regraded Score: 3 / 3 pts

This question has been regraded.

The following assembly statement sets only bit 7 and leaves the other bits unchanged of a binary value in AL. Note that the least significant bit is bit 0.

- and al,10101010b
- (selected) and al,10000000b
- xor al,10000000b
- or al,10000000b

Question 15

3 / 3 pts

The following assembly statement clears bit 3 of a value in AL. Note that the least significant bit is bit 0.

- xor al,11110111b
- (selected) and al,11110111b

- or al, 11110111b
- xor al, 00001000b

Question 16

3 / 3 pts

The following assembly statement inverts the upper half and retains the lower half of a 16-bit value in AX. Note that the least significant bit is bit 0.

- (selected) xor ax,0FF00h
- and ax,0000h
- or ax,0FF00h
- xor ax,00FFh

Incorrect

Question 17

0 / 4 pts

Specify one assembly instruction that sets the overflow flag on Line 2. Use lower-case letters for your answer.

mov al,7Fh

___ al ;Line 2

not

Question 18

6 / 6 pts

What will be the value in AX in hexadecimal format after Line 1 is executed? Use the 16-bit hexadecimal value for your answer.

.data

var1 byte 1,2,3,4

```
var2 word 1011h,2022h,3033h,4044h
var3 sword 8088h,9099h
var4 dword 1,2,3,4,5
.code
mov ax,word ptr var1          ;Line 1
mov ax,[var2+2]               ;Line 2
mov ax,[var3+1]               ;Line 3
mov ax,[var3-5]               ;Line 4
```

0201h

Question 19

6 / 6 pts

What will be the value in AX in hexadecimal format after Line 2 is executed? Use the 16-bit hexadecimal value for your answer.

```
.data
var1 byte 1,2,3,4
var2 word 1011h,2022h,3033h,4044h
var3 sword 8088h,9099h
var4 dword 1,2,3,4,5
.code
mov ax,word ptr var1          ;Line 1
mov ax,[var2+2]               ;Line 2
mov ax,[var3+1]               ;Line 3
mov ax,[var3-5]               ;Line 4
```

2022h

Question 20

6 / 6 pts

What will be the value in AX in hexadecimal format after Line 3 is executed? Use the 16-bit hexadecimal value for your answer.

```
.data
var1 byte 1,2,3,4
var2 word 1011h,2022h,3033h,4044h
var3 sword 8088h,9099h
var4 dword 1,2,3,4,5
.code
mov ax,word ptr var1          ;Line 1
mov ax,[var2+2]               ;Line 2
mov ax,[var3+1]               ;Line 3
mov ax,[var3-5]               ;Line 4
```

9980h

Incorrect

Question 21

0 / 6 pts

What will be the value in AX in hexadecimal format after Line 4 is executed? Use the 16-bit hexadecimal value for your answer.

```
.data
var1 byte 1,2,3,4
var2 word 1011h,2022h,3033h,4044h
var3 sword 8088h,9099h
var4 dword 1,2,3,4,5
.code
mov ax,word ptr var1          ;Line 1
mov ax,[var2+2]               ;Line 2
mov ax,[var3+1]               ;Line 3
mov ax,[var3-5]               ;Line 4
```

2022h

Question 22

3 / 3 pts

Use $, type, and dup to initialize array2 with 0. Assume that array1 and array2 have the same size. Use lower-case letters and numbers for your answer.

.data

array1 dword 10h,20h,30h,40h,50h

array2 dword _____

- ($-array1)/dword type dup(0)
- ($-array1)/type dword dup(0)
- ($-array2)/array2 dup(0)
- ($-array2)/type dword dup(0)

Question 23

6 / 6 pts

What will be the value in EAX after the following lines are executed? Use the 32-bit hexadecimal value for your answer.

.data

dVal dword 23456789h

.code

mov ax,80h

mov word ptr dVal+1,ax

mov eax,dVal

23008089h

Incorrect

Question 24

0 / 6 pts

What is the value of EAX after this program is executed? Use the 32-bit hexadecimal value for your answer.

```
.data
a dword 10000001h,10000002h,10000003h,10000010h,10000020h
sum dword 0
.code
main proc
   mov esi,offset a+4
   mov ecx,lengthof a-1
L1:
   mov eax,[esi]
   add sum,eax
   add esi,type dword
   loop L1
   mov eax,sum
   invoke ExitProcess,0
main endp
end main
```

00000035h

Incorrect

Question 25

0 / 6 pts

What is the value of EAX after this program is executed? Use the 32-bit hexadecimal value for your answer.

```
.data
a dword 10000001h,10000002h,10000003h,10000004h,10000005h
sum dword 0
.code
main proc
   mov esi,offset a+8
   mov ecx,2
L1:
   mov eax,[esi]
   add sum,eax
   add esi,type dword
```

```
    loop L1
    mov eax,sum
    invoke ExitProcess,0
main endp
end main
```

00000007h

Quiz Score: **73** out of 100