

Name:

Id#

**COE 205, Term 023**  
**Computer Organization & Assembly Programming**

**Quiz# 3**

Date: Wednesday, July 16, 2003

**Q1.** Suppose that the following data segment is allocated in the segment given in the DS register with an offset of 0. Show the content of the allocated memory, in hexadecimal. Note that the ASCII code of character 'A' is 41H and that of 'a' is 61H.

```
I    DB    -1, 255, 'Ab'  
      DW    1E4H, `Ab`  
L    EQU   50  
J    DD    L-17  
      DW    offset I+12  
K    DB    2 dup( 2dup(2,-2))
```

<i>Memory Address (Hex)</i>	<i>Memory Content Hex)</i>
0000	
0001	
0002	
0003	
0004	
0005	
0006	
0007	
0008	
0009	
000A	
000B	
000C	
000D	
000E	
000F	
0010	
0011	
0012	
0013	
0014	
0015	
0016	
0017	
0018	

**Q2.** Given the following data declarations, determine what is printed by each of the following statements. Note that the ASCII code for the Line Feed character is 10 and that for the Carriage Return is 13:

```
MSG DB "Hello",13, " COE 205 ", 10, " Q2 ", "$"  
MSG2 DB "Hello",10, 13, " COE 205 ", " Q2 "  
MSG3 DB " Quiz#3 ", "$"
```

- (i) 

```
MOV AH, 2  
MOV DL, MSG  
INT 21H
```
  
- (ii) 

```
MOV AH, 2  
MOV DL, MSG3-1  
INT 21H
```
  
- (iii) 

```
MOV AH, 9  
MOV DX, Offset MSG  
INT 21H
```
  
- (iv) 

```
MOV AH, 9  
LEA DX, MSG2  
INT 21H
```