

Name:

Id#

COE 205, Term 031
Computer Organization & Assembly Programming

Quiz# 3

Date: Tuesday, Oct. 14, 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    -120, 136
        DW    1FH
L    EQU  10
J    DD    L-3
        DW    offset I+1
K    DB    2 dup( 2dup(0FH,-1))
```

| <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 | |

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",10, " COE 205 ", 13, " Q2 ", "$"  
MSG2 DB "COE 205 ", 0DH, " Q2 "  
MSG3 DB " Quiz#3 ", "$"
```

- (i) **MOV AH, 2**
MOV DL, MSG+1
INT 21H
- (ii) **MOV AH, 9**
MOV DX, Offset MSG
INT 21H
- (iii) **MOV AH, 9**
LEA DX, MSG2
INT 21H