

Name: Key

Id#

COE 205, Term 042
Computer Organization & Assembly Programming
Quiz# 3

Date: Tuesday, March 15, 2005

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 -14, 100, '200'
J DW 255, 1CH
K EQU 2
L DW J-K
DD offset I+16
M DB 2, 2 dup(1,2)

Variable	Memory Address (Hex)	Memory Content Hex)	
I	0000	F2	} DB -14 } 100 } '200'
	0001	64	
	0002	32	
	0003	30	
	0004	30	} DW 255
J	0005	FF	
	0006	00	} DW 1CH
	0007	1C	
	0008	00	} DW J-K
L	0009	03	
	000A	00	
	000B	10	} DD offset I } +16
	000C	00	
	000D	00	
	000E	00	
M	000F	02	} 2, 2dup(1,2)
	0010	01	
	0011	02	
	0012	01	
	0013	02	
	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 "Ali",13,"Ahmad",10,"Khaled",0DH,0AH
MSG2     DB "Samy $"
MSG3     DB "Waleed", "$"
```

(i) MOV AH, 2
MOV DL, MSG2[2]
INT 21H

m

(ii) MOV AH, 9
MOV DX, Offset MSG
INT 21H

Ahmad
Khaled
Samy

(iii) MOV AH, 9
LEA DX, MSG3+2
INT 21H

eed
