

COE 205 : Computer Organization & Assembly Language

Quiz 1 Solution – Tuesday, March 22, 2005

Q1. (6 pts) Suppose that the following data segment is allocated in the segment given in the *DS* register. Show the content of the memory allocated, in hexadecimal, and the offsets of variables *J*, *K*, and *L*, assuming that variable *I* is at offset 0. Note that the ASCII code of character 'A' is 41H and that of '\$' is 24H.

```
.DATA
I   DB   12, -12, 'BD'
J   DW   126, 1AH
K   DW   OFFSET J + 10
    DD   17
L   DB   4, 6 DUP ('$')
```

Logical Address (Hex)	Variable	Content (Hex)
DS:0000	I	0C
0001		F4
0002		42
0003		44
0004	J	7E
0005		00
0006		1A
0007		00
0008	K	0E
0009		00
000A		11
000B		00
000C		00
000D		00
000E	L	04
000F		24
0010		24
0011		24
0012		24
0013		24
0014		24

