Name: **Id#**

COE 205, Term 082

Computer Organization & Assembly Programming

Quiz# 5

Date: Saturday, May 30, 2009

Q1. Write a macro, **movm**, that allows the movement of a memory variable to a memory variable. It is assumed that both memory variables are of the same type and can be only of type word or dword. The macro should not disturb the content of any of the registers. For example to move the content of double word variable I to double word variable J, we write movm J, I.

Q2. Discuss the advantages and disadvantages of macros in comparison to procedures.

Q3. Given the following macro definition:

```
MyMacro    MACRO   N
              M=1
              F=1
              REPT N
                 DW F
                 M=M+1
                 F=M*F
              ENDM
          ENDM
```

Determine the code generated due to the following declaration:

```
Array   LABEL   WORD
MyMacro    5
```

Q4. Given the following macro definition:

```
SREG   MACRO   REGS
                  IRP D, <REGS>
                     PUSH D
                  ENDM
               ENDM
```

Determine the code generated due to the following declaration:

```
SREG < EAX, ECX, ESI>
```