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>**