

**NOTE:** TO obtain credit for your performance in this exam, you must do all of the following: (1) Select one of the specified choices for multiple-choice questions (do NOT fill in the actual value of your answer, but instead indicate the lettered choice corresponding to it). (2) Sign the Honor Code declaration. (3) Wherever applicable, show your work.

## ***CS-350: Computer Organization***

# **Spring 2003: Quiz # 6 ANSWERS**

Below is a list of Assembly-Language instructions for the Intel 8085 processor. Indicate the type for each instruction:

*1 pt each*

Mnemonic	Description of Instruction Function
1. <i>Rcond</i>	If condition is true, then return from subroutine
2. <i>CMA</i>	Complement the contents of the Accumulator
3. <i>PUSH PSW</i>	Push the contents of the Processor Status Word onto the stack
4. <i>XTHL</i>	Exchange the contents of the <i>HL</i> register pair with the top of the stack
5. <i>ADD</i>	Add to the accumulator the contents of the specified register or memory location.

Choice Identifier	Instruction Type
<b>A</b>	Data-Transfer
<b>B</b>	Data-Operation
<b>C</b>	Program-Control

6. Which of the following registers are *not* programmer-accessible, that is, they can not be specified in an Assembly-Language program as either the source or the destination of a Data-Transfer or of a Data-Operation instruction?

*5 pts*

Choice	Registers	
<b>D</b>	Memory Address Register (MAR)	<b>X</b>
<b>E</b>	Memory Buffer Register (MBR)	<b>X</b>
<b>F</b>	Program Counter (PC)	<b>X</b>
<b>G</b>	Accumulator	
<b>H</b>	Instruction Register (IR)	<b>X</b>
<b>I</b>	Index Register	
<b>J</b>	all six of the above	
<b>K</b>	five of the above	
<b>L</b>	Four of the above	
<b>M</b>	three of the above	
<b>N</b>	two of the above	

Question	Answer
<b>1</b>	<b>C</b>
<b>2</b>	<b>B</b>
<b>3</b>	<b>A</b>
<b>4</b>	<b>A</b>
<b>5</b>	<b>B</b>
<b>6</b>	<b>L</b>