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CPE138

#### Homework 4

1. When accessing the BIOS services, register holds the service number.

#### **THE REGISTER AH**

2. Which instruction sequence below transfers control to a memory location named A1 if register AL = 40H?

**Sequence 2:**

**MOV BL,40H**

**CMP AL, BL**

**JNZ A1**

3. The ASCII code defines different letters, numbers, punctuation marks, and control codes.

**128**

4. Determine the contents of register AL after the following instructions have executed:

MOV AL, 58H

AND AL,FOH

**50H**

5. Determine the contents of register AL after the following instructions have

executed:

MOV AL,E2H

MOV CL,5

ROR AL ,CL

**17H**

6. Determine the contents of register BL after the following instructions have

executed:

MOV BL,,79H

MOV AL,82H

SUB BL,Al,

SBB BL,13H

**E3**

7. For the instruction sequence below, determine the contents of register AL (a) after the add instruction and (b) after the DAA instruction.

MOV AL, 46H

ADD AL, 85H

DAA

A) CBH

B) 31h

8. When using DOS INT 21, function 0AH (buffered keyboard input), the first byte of the buffer represents:

(a) the actual length of the buffer

**(b) the maximum length of the buffer**

(c) the first character typed from the keyboard