

**TAMUC CSCI516 Placement/Deficiency Exam      Sample Questions***This is a courtesy question sample shared for guiding you about the deficiency exam; the actual exam contents, question types might vary.***Multiple choice Circle only one letter for the correct answer!****Question:** What will be the hexadecimal value of AL after these instructions execute?

```
mov al, 94h
xor al, 37h
```

- a. B7h      b. A3h      c. 3Fh      d. 7Bh      e. none of the above

**Question:** Which answer choice shows the correct values of the Carry, Zero, and Sign flags after the following instructions execute?

```
mov al, 6
cmp al, 5
```

- a. CF = 0, ZF = 0, SF = 0  
 b. CF = 1, ZF = 0, SF = 0  
 c. CF = 1, ZF = 1, SF = 0  
 d. CF = 1, ZF = 0, SF = 1  
 e. CF = 1, ZF = 1, SF = 1

**Question:** What will be the hexadecimal values of DX and AX after the following instructions have executed?

```
mov ax, 6B49h
mov dx, 0095h
shl ax, 1
rcl dx, 1
```

- a. DX = 0148h, AX = C691h  
 b. DX = 012Ah, AX = C9A2h  
 c. DX = 012Ah, AX = D692h  
 d. DX = 024Bh, AX = D692h  
 e. DX = 020Bh, AX = D6A2h

**Question:** What will be the value of ECX when the following sequence of instructions has executed?

```
push 5
push 10
pop ebx
pop eax
pop ecx
```

- a. 20      b. 15      c. 10      d. 5      e. cannot be determined

**Short Answer and Short Programming Questions. Write legibly.****Question:** What will be the hexadecimal values of EDX, EAX, and the Carry Flag after the following instructions in the left box execute? Put your answers in the right box:

```
mov eax, 00371453h
mov ecx, 10000h
mul ecx
```

**Answer:****Question:** Suppose the following data for this question:

```
.data
val1 SDWORD ?
val2 SDWORD ?
```

Implement the pseudocode in the left box using Assembly Language using the appropriate operations which might include: `mov`, `jmp`, `jg`, `jng`, `je`, `jle` or `jne` operations. Write your code in the right box. Just put down the core of the, **not** the title nor data etc. So, your code should start with the **mov** operation and it should be less than 13 lines.

```
if( val1 > val2 || val2 > eax )
  mov ebx, 1;
else
  mov ebx, 2;
```

**Answer:**