**1. What is the format of XLAT.**

XLAT

Set AL to memory byte DS:[(E)BX + unsigned AL]

**2. After execution of these instructions which flag will effect**

**a.DAA b. AND c.AAS**

a. The **CF** and **AF** flags are set if the adjustment of the value results in a decimal carry in either digit of the result. The SF, ZF, and PF flags are set according to the result. The OF flag is undefined.

b. **ZF**.

c. The **AF and CF** flags are set to 1 if there is a decimal borrow.

**3. Write the format of IDIV where do we get Q and R (16 bit)**

IDIV <register>

Q - AX

R – DX

**4. Draw the shift pattern of logical and arithmetic shifting**

When shifting right with a logical right shift, the least-significant bit is lost and a 00 is inserted on the other end.

1011 >> 1 → 0101

When shifting right with an arithmetic right shift, the least-significant bit is lost and the most-significant bit is copied.

1011 >> 1 → 1101

**5. MOV dl, 5**

**SHL dl, 1; after this what will be content of dl**

Initially, DL: 0101

After shifting, DL: 1010

**6. MOV dl,-80**

**SAR dl,1**

**SAR dl,2 Write output after each sift**

**MOV dl,-80;** DL = 10110000b

**sar dl,1 ;** DL = 11011000b = -40, CF = 0

**sar dl,2 ;** DL = 11110110b = -10, CF = 0

**7. Instruction STD and CLI represents what also write the flag affected.**

**STD**: Sets the DF flag. When the DF flag is set to 1, string operations decrement the index registers (SI and/or DI).

**CLI**: Clears the Interrupt flag. No other flags are affected. Clearing the IF flag causes the processor to ignore maskable external interrupts.

**8. What is JCXZ represents**

Jump if Register CX is Zero