Tutorial-1

| 1. | Specify the memory location and its contents after the following instructions are | | | | | | | | | | | |
|----|---|----------------|--|--|--|--|----|--|--|--|--|--|
| | executed. | | | | | | | | | | | |
| | MVI B, F7H | | | | | | | | | | | |
| | MOV A,B | | | | | | | | | | | |
| | STA XX75H | | | | | | | | | | | |
| | HLT | | | | | | | | | | | |
| 2. | Show the register contents as each of the following instructions is being executed. | | | | | | | | | | | |
| | A B C D E H | L | | | | | | | | | | |
| | MVI C, FFH | | | | | | | | | | | |
| | LXI H,XX70H LXI D,XX70H MOV M,C LDAX D | | | | | | | | | | | |
| | | | | | | | | HLT | | | | |
| | | | | | | | 3. | Specify the contents of the accumulator and the CY flag when the following | | | | |
| | | | | | | | | instructions are executed. | | | | |
| | (a) MVI A, C5H | (B) MVI A, A7H | | | | | | | | | | |
| | ORA A | ORA A | | | | | | | | | | |
| | RAL | RAR | | | | | | | | | | |
| | RRC | RAL | | | | | | | | | | |
| 4. | The accumulator in the following set of instructions contains a BCD number. Explain | | | | | | | | | | | |
| | the function of these instructions: | | | | | | | | | | | |
| | MVI A,79H | | | | | | | | | | | |
| | ANI F0H | | | | | | | | | | | |
| | RRC | | | | | | | | | | | |
| | RRC | | | | | | | | | | | |
| | RRC | | | | | | | | | | | |

RRC

| 5. | Explain the | mathematical | function that | at is | performed | by the | following | instructions |
|----|-------------|--------------|---------------|-------|-----------|--------|-----------|--------------|
| | | | | | | | | |

MVI A, 07H

RLC

MOV B,A

RLC

RLC

ADD B