

## **1.What are the flags in 8086?**

- In 8086 Carry flag, Parity flag, Auxiliary carry flag, Zero flag, Overflow flag, Trace flag, Interrupt flag, Direction flag, and Sign flag.

## **2.What are the various interrupts in 8086?**

- Maskable interrupts, Non-Maskable interrupts.

## **3.What is meant by Maskable interrupts?**

- An interrupt that can be turned off by the programmer is known as Maskable interrupt.

## **4.What is Non-Maskable interrupts?**

An interrupt which can never be turned off (ie.disabled) is known as Non-Maskable interrupt.

## **5.Which interrupts are generally used for critical events?**

- Non-Maskable interrupts are used in critical events. Such as Power failure, Emergency, Shut off etc.,

## **6.Give examples for Maskable interrupts?**

- RST 7.5, RST6.5, RST5.5 are Maskable interrupts

## **7.Give example for Non-Maskable interrupts?**

- Trap is known as Non-Maskable interrupts, which is used in emergency condition.

## **8.What is the Maximum clock frequency in 8086?**

- 5 Mhz is the Maximum clock frequency in 8086.

## **9.What are the various segment registers in 8086?**

- Code, Data, Stack, Extra Segment registers in 8086.

## **10.Which Stack is used in 8086?**

- FIFO (First In First Out) stack is used in 8086.In this type of Stack the first stored information is retrieved first.

**11.What are the address lines for the software interrupts? -**

RST 0	0000 H
RST1	0008 H
RST2	0010 H
RST3	0018 H
RST4	0020 H
RST5	0028 H
RST6	0030 H
RST7	0038 H

**12.What is SIM and RIM instructions?**

- SIM is Set Interrupt Mask. Used to mask the hardware interrupts. RIM is Read Interrupt Mask. Used to check whether the interrupt is Masked or not.

**13.Which is the tool used to connect the user and the computer?**

- Interpreter is the tool used to connect the user and the tool.

**14.What is the position of the Stack Pointer after the PUSH instruction?**

- The address line is 02 less than the earlier value.

**15.What is the position of the Stack Pointer after the POP instruction?**

- The address line is 02 greater than the earlier value.

**16.Logic calculations are done in which type of registers?**

- Accumulator is the register in which Arithmetic and Logic calculations are done.

## **17.What are the different functional units in 8086?**

- Bus Interface Unit and Execution unit, are the two different functional units in 8086.

## **18.Give examples for Micro controller?**

- Z80, Intel MSC51 &96, Motorola are the best examples of Microcontroller.

## **19.What is meant by cross-compiler?**

- A program runs on one machine and executes on another is called as cross-compiler.

## **20.What are the address lines for the hardware interrupts? -**

<b>RST 7.5</b>	<b>003C H</b>
<b>RST 6.5</b>	<b>0034 H</b>
<b>RST 5.5</b>	<b>002C H</b>
<b>TRAP</b>	<b>0024 H</b>

## **21.Which Segment is used to store interrupt and subroutine return address registers?**

- Stack Segment in segment register is used to store interrupt and subroutine return address registers.

## **22.Which Flags can be set or reset by the programmer and also used to control the operation of the processor?**

- Trace Flag, Interrupt Flag, Direction Flag.

## **23.What does EU do?**

- Execution Unit receives program instruction codes and data from BIU, executes these instructions and store the result in general registers.

## **24.Which microprocessor accepts the program written for 8086 without any changes?**

- 8088 is that processor.

## **25.What is the difference between 8086 and 8088?**

- The BIU in 8088 is 8-bit data bus & 16- bit in 8086.Instruction queue is 4 byte long in 8088and 6 byte in 8086.