

**Gujarat University**  
**Question Bank**  
**Subject - Microprocessor and Interface**  
**Branch - Computer Engineering Semester -4**

1	What is a Microprocessor? What is the difference between a Microprocessor & CPU?
2	Explain the difference between following. 1. machine language and the assembly language 2. Low level language and high level language 3. Compiler and assembler
3	List out the operations commonly performed by MPU.
4	Describe different control signals used by 8085 microprocessor.
5	How many memory locations can be addressed by a microprocessor with 14 address lines? How many address lines are necessary to address two megabytes (2048K) of memory?
6	List all the interrupt signals of 8085 microprocessor.
7	Discuss the programming model of 8085 $\mu$ P with the help of suitable diagram.
8	Write short note on evolution of microprocessors.
9	Discuss various types of addressing modes of 8085.
10	In the peripheral-mapped I/O, can an input port and an output port have the same port address? Explain.
11	Explain why the number of output ports in the peripheral-mapped I/O is restricted to 256 ports.
12	Write logical steps to add the following two Hex numbers. Both the numbers should be saved for future use. Save the sum in the accumulator. Numbers: A2H and 18H.
13	Specify the contents of the registers and the flag status as the following instructions are executed. i. MVI A, 00H ii. MVI B, F8H iii. MOV C, A iv. MOV D, B v. HLT
14	Write instructions to load the hexadecimal number 65H in register C and 92H in Accumulator A. Display the number 65H at PORT0 and 92H at PORT1.
15	Draw and explain the block diagram of a microprocessor 8085.
16	Differentiate between maskable and non-maskable interrupts.
17	Explain in detail the following instructions:- (i)ADC (ii) LHL (iii) RLC (iv) DI
18	Write short note on subroutine call & return.
19	Write short note on memory interfacing.
20	Explain logical Architecture Of 8051.
21	Explain microprocessor system BUS organization.
22	List and explain different functions/Operations performed by microprocessor.
23	Draw and explain Pin diagram of 8051 micro controller.

24	Differentiate Microprocessor with Micro controller in brief.
25	Write a short note on: 8251A USART.
26	Explain Analog to Digital Data Converters.
27	Explain Digital to Analog Data Converters.
28	Write a short note on 8279 Keyboard/ Display Interface.
29	Explain in brief: 8237 DMA controller.
30	Define: 1) SID 2) SOD.
31	Pin function of 8085Microprocessor architecture.
32	Write a assembly language programme to add two 8 bit numbers.
33	What is an Interrupt? Explain different types of interrupt.
34	Explain 8253/8254 Timer with a suitable diagram
35	Write down the steps for debugging a assembly language programme.
36	Explain in detail : ADD, MOV, MVI, SUB
37	Explain classification of Instruction Sets.
38	Explain in detail memory interfacing of 8085 microprocessor architecture
39	Write short note on: Demultiplexing of Buses.
40	Short note on Counters.