

## **Tutorial of Microprocessors**

**Please use A4 sheets to submit your answer.**

- 1 Make the block diagram of 8085 and explain in one paragraph.
- 2 Explain the flags of 8085 with the help of a neat diagram.
- 3 Write the addressing modes of 8085 with one example each.
- 4 Classify memory with the help of a diagram.
- 5 Write the working principle of SRAM. One paragraph for read operation and one paragraph for write operation.
- 6 Write the working principle of DRAM. One paragraph for read operation and one paragraph for write operation.
- 7 Differentiate between I/O mapped I/O and Memory mapped I/O.
- 8 Differentiate between Von Neumann architecture and Harvard architecture.
- 9 Differentiate between Microprocessor and Microcontroller.
- 10 Differentiate between serial and parallel communication.
- 11 Differentiate between synchronous and asynchronous communication.
- 12 Mention the interrupt priority in 8085.
- 13 Show the connection of two PC via a modem using RS-232 standard.
- 14 What do you mean by null modem connection?
- 15 Describe DMA with the help of a neat diagram.
- 16 Make the diagram of 8255 and explain in one paragraph.
- 17 Describe about the modes of 8255.
- 18 Explain the control word of 8255.
- 19 Explain the BSR mode control word of 8255.
- 20 Describe the block diagram of 8259 with the help of a neat diagram.
- 21 Explain the initialization of 8259 in short.
- 22 Describe the block diagram of 8251 with the help of a neat diagram.
- 23 How is 8251 initially configured?
- 24 Differentiate between CISC and RISC.
- 25 How is address bus demultiplexed from data bus in 8085?
- 26 Differentiate between SRAM and DRAM.
- 27 Write about SIM and RIM instruction in 8085.
- 28 Differentiate between Minimum and Maximum mode in 8086.
- 29 Make the diagram of 8086 and explain in one paragraph.
- 30 Explain the flags of 8086 with the help of a neat diagram.
- 31 Write the addressing modes of 8086 with one example each.
- 32 How is memory address generated in 8086?
- 33 Why is 8086 faster than 8085?
- 34 Describe the interrupt operation in 8086 with the help of a diagram.
- 35 What is IVT?
- 36 What are assembler directives? Name five assembler directives in MASM.
- 37 What do you mean by one-pass assembler and two-pass assembler?
- 38 What do you mean by a MACRO and PROCEDURE?
- 39 Write the features of 80386.
- 40 Write about ROL and ROR instruction in 8086.