

1. Draw the pin diagram of Intel 8085 microprocessor & explain the function of each pin.
2. What is microprocessor?
3. Describe the evolution of microprocessor.
4. Describe the bus structure of 8085 microprocessor.
5. Difference betⁿ GPR and SPR of Intel 8085 microprocessor.
6. Write two examples of GPR & SPR of 8085 microprocessor with their sizes.
7. What are different interrupts of 8085 microprocessor?
8. Draw the functional block diagram of the 8085 microprocessor & explain in brief.
9. List the internal registers in the 8085 microprocessor; also describe briefly the primary function of each register.
10. Explain masking of interrupts (RIM, SIM)

Chapter-2

1. Explain stack & subroutine.
2. What is addressing mode? Describe different types of addressing modes with examples.
3. Describe PSW.
4. Write a program to find largest data in an array using instructions of 8085.
5. Show the different bit positions for flag registers of Intel 8085 MPU.
6. What is the difference between SUB B & CMP B instruction of Intel 8085?
7. Name two instructions of Intel 8085 microprocessor to clear the content of accumulator.
8. Write a complete assembly language programme to find decimal subtraction of two 8-bit data present in two consecutive memory locations & store the result in next memory location.
9. Write an assembly language program to add two 8-bit numbers using 8085.
10. Write an assembly language program to subtract two 8-bit numbers.
11. Write an assembly language program to find 1's complement of 8-bit numbers.
12. Write an assembly language program to add two 16-bit numbers.
13. Explain different types of instruction set of 8085 MPU.

1. what is T-state.
2. Define opcode & operand.
3. Define Machine Cycle.
4. Define Fetch cycle.
5. Define Instruction cycle.
6. Draw the timing diagram of opcode fetch.
7. Draw the timing diagram of Memory read.
8. Draw the timing diagram of Memory write.
9. Draw the timing diagram of I/O read & I/O write.
10. Draw the timing diagram of "MOV C, A" & explain it.
11. Draw the neat timing diagram for the instruction "MVI L, 43H" of 8085 microprocessor.
12. Name different machine cycle with their functions for INR M instruction.

1. Define mapping.
2. Differentiate between Memory mapping & I/O Mapping.
3. Write a program for traffic light control using 8085- instruction sets & interfacing kits.
4. Explain control word of 8255.
5. Describe functional block diagram of 8255 with a neat block diagram.

1. Define Microcontroller.
2. Describe the architecture of 8051 microcontroller.
3. What are the various ports available in 8051?
4. What is \overline{PSEN} ?
5. Differentiate between microcontroller & general purpose Microprocessor.
6. Explain 8051 register bank & stack.
7. Explain 8051 Timers.
8. What is register bank select bit?
9. What is the function of the bits P8W.3 & P8W.4?
10. Explain memory organisation of 8051 microcontroller.
11. Explain briefly TMOD register with example.
12. Explain briefly TCON register with example.
13. Give a brief discussion about Interrupt priority register and interrupt enable register.
14. Explain the function of PC & DPTR.
15. What is the function of stack pointer & program counter?

11. Write instruction to set & clear a bit.
12. ~~Explain~~ Write a program to toggle all bits of P1 continuously.
13. Write the difference betⁿ packed BCD & unpacked BCD.
14. Discuss briefly about 8051 programming model.

1. Give any two examples of JUMP & CALL instruction.
2. Write a program to multiply the data in R5 & R6 adding the 16 bit result to R1 & R2.
3. State the difference betⁿ LCALL & ACALL.
4. Differentiate between LJMP & SJMP.
5. Write the function for the following instruction
"DJNZ reg, label".
6. Write a program to add ten natural numbers.
7. Write a program to create a square wave of 50% duty cycle on bit 0 of port 1.
8. Write a program to create a square wave of 66% of duty on bit 3 of port 1.
9. What is the function of the instruction DAA?
10. Write the difference betⁿ Unsigned addition & Signed addition.