

Assignment Number -04 (A)

TEE-404 Microprocessor and Its Application/TCS-405 Microprocessors

Er. Yadvendra Sharan

Assistant Professor

Department of Electrical & Electronics Engineering

Phonics Group of Institutions, Roorkee

Phone: +91-8273990016

yadvendra.sharan@yahoo.com

yadvendrasharan.wordpress.com

Objective: To introduce the concepts of Assembly language programming for the Intel-8085 Microprocessor.

Unit: II

1. Write the function of the given opcode XCHG, STA, XTHL, SUI, STAX.
2. Define the assembler directives of 8085.
3. Write an 8085 assembly language program to determine the 2's complement of an 8-bit number without using any logical instruction. Store the result in memory.
4. Explain the register indirect addressing with examples.
5. For the following 8085 instructions, explain the operation performed, name the machine cycle taken for execution, addressing mode of instruction and flag affected
 - i. SHLD 5000H
 - ii. INR M
 - iii. ADD B
6. What is meant by the software interrupts any why they are used? List out all the software interrupts of 8085 and give their vector addresses. How DI instruction affects these interrupts?
7. Two 8-bit numbers are stored in memory. Write an 8085 assembly program to perform the addition and subtraction of these two numbers and store the 8-bit result back into memory. Numbers are represented in hexadecimal system.
8. Two 8-bit numbers are stored in memory. Write an 8085 assembly program to perform the addition of these two numbers and store the 16-bit result back into memory. Numbers are represented in hexadecimal system.