SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS)
(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai — 600 044.
B.Sc. END SEMESTER EXAMINATIONS NOVEMBER-2022
SEMESTER - V
20UPHET5001 - Microprocessor – 8085

Total Duration : 2 Hrs 30 Mins. **Total Marks : 60**

Section A

Answer any **SIX** questions $(6 \times 5 = 30$ Marks)

1. Explain the function of ALU in 8085.
2. Describe the interrupts of 8085.
3. Write an assembly language program to add two 8 bit numbers stored at memory locations D200 H and D300 H. Store the answer at memory location D400 H.
4. Illustrate the memory address range of a memory chip with 256 bytes of memory. Draw a neat diagram to show the memory map and explain how this memory chip is accessed by 8085 microprocessor.
5. Explain in detail about the programming model of 8085 microprocessor.
6. Compute the difference between SIM and RIM instructions.
7. List out the five categories of the 8085 instructions, Give examples of the instructions for each group.
8. 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.

Section B

Answer any **THREE** questions $(3 \times 10 = 30$ Marks)

9. Illustrate neat block diagram of 8085 microprocessor and explain its internal architecture.
10. Describe the interfacing of 2k x 8 EPROM and 2k x 8 RAM in detail.
11. Infer about the various operating modes 8255(PPI).
12. With example explain the different addressing modes of 8085 and the different types of instruction.
13. Write 8085 assembly language program to SORT an array of 10 bytes in Descending order.

*****

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS)
(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai — 600 044.
B.Sc. END SEMESTER EXAMINATIONS NOVEMBER-2022
SEMESTER - V
20UPHET5001 - Microprocessor – 8085

Total Duration : 2 Hrs 30 Mins. **Total Marks : 60**

Section A

Answer any **SIX** questions $(6 \times 5 = 30$ Marks)

1. Explain the function of ALU in 8085.
2. Describe the interrupts of 8085.
3. Write an assembly language program to add two 8 bit numbers stored at memory locations D200 H and D300 H. Store the answer at memory location D400 H.
4. Illustrate the memory address range of a memory chip with 256 bytes of memory. Draw a neat diagram to show the memory map and explain how this memory chip is accessed by 8085 microprocessor.
5. Explain in detail about the programming model of 8085 microprocessor.
6. Compute the difference between SIM and RIM instructions.
7. List out the five categories of the 8085 instructions, Give examples of the instructions for each group.
8. 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.

Section B

Answer any **THREE** questions $(3 \times 10 = 30$ Marks)

9. Illustrate neat block diagram of 8085 microprocessor and explain its internal architecture.
10. Describe the interfacing of 2k x 8 EPROM and 2k x 8 RAM in detail.
11. Infer about the various operating modes 8255(PPI).
12. With example explain the different addressing modes of 8085 and the different types of instruction.
13. Write 8085 assembly language program to SORT an array of 10 bytes in Descending order.

*****