20UPHET5001

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.(Physics) END SEMESTER EXAMINATIONS NOVEMBER -2023 SEMESTER - V 20UPHET5001 - Microprocessor-8085

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

- 1. Explain the features of the microprocessor and describe the pin configuration of 8085.
- 2. Explain the different addressing modes of 8085.
- 3. Write an 8085-assembly language program to sort an array of data in ascending order.
- 4. Draw and explain the timing diagram for the memory read operation performed by 8085.
- 5. Explain the following instructions: DAD rp; CMP M; DAA; CMC,LXI.
- 6. Discuss the advantages of assembly language over machine language.
- 7. Briefly explain Direct I/O and Memory-mapped I/O.
- 8. Write detailed notes on interrupts in the 8085 microprocessor.

Section C

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

- 9. Explain the architecture of the 8085 microprocessor with a block diagram.
- 10. List the general classification of the instruction set of 8085 and explain.
- 11. Write an 8085-assembly language program to perform the multiplication of 8-bit numbers.
- 12. Explain the Interfacing of 2Kx8 EPROM and 2kx8 RAM interface.
- 13. Describe in detail the LED interface with the microprocessor.
