



ABV- Indian Institute of Information Technology & Management, Gwalior

EE303: Microprocessor and Interfacing

Major Examination (Session 2023–24)

Maximum Time: 3 Hours

Max Marks: 45

Note: Attempt all questions. Draw neat diagrams wherever required.

1. (a) Draw and explain the functional block diagram of 8085 microprocessor. (b) Explain the role of program counter and stack pointer. (8 Marks)
2. (a) Discuss various addressing modes of 8085 with examples. (b) Write an assembly language program to find the largest number in a list of 10 numbers. (8 Marks)
3. (a) Explain the interfacing of 8085 with 8255 PPI. (b) Describe modes of operation of 8255. (8 Marks)
4. (a) What is the difference between vectored and non-vectored interrupts? (b) Explain the interrupt structure of 8085. (7 Marks)
5. (a) Explain the timing diagram for the execution of the instruction LDA 2500H. (b) Differentiate between machine cycle and instruction cycle. (7 Marks)
6. Write short notes on any two: (i) 8279 Keyboard/Display Controller (ii) 8259 Programmable Interrupt Controller (iii) Serial Communication in 8085 (7 Marks)