

MEIC-301(A)
M.E./M.Tech., III Semester Examination, June 2020
Advanced Microprocessor
(Elective-I)
Time : Three Hours

Maximum Marks : 70

- Note :** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Draw internal architecture of 8 bit microprocessor.
b) Write a program for 8085 microprocessor to add eight 8-bit numbers stored in light consecutive memory locations.
2. a) Explain sBus Interface unit and Execution unit of 8086 microprocessor using suitable block diagram.
b) Illustrate with the example, the calculations of effective addresses in different addressing modes of 8086 microprocessor.
3. a) Explain memory segmentation and flag register of 8086 microprocessor.
b) Describe the need for addressing modes in microprocessor. Compare the addressing modes of 8085 with 8086.
4. a) Draw and discuss minimum mode 8086 system with the help of timing diagram.
b) Explain stack structure of 8086. What is the role of stack is calling a subroutine and returning from a routine?
5. a) Explain the architecture of programmable peripheral interface chip 8255 in details.
b) Write the C.M.R format of 8253 and explain the modes of operation detail.
6. a) Explain the architecture of 8051 micro controller with function of each block.
b) Explain the various family of Intel 8 bit micro controller with example.
7. a) What is interrupt priority and how it can be modify in 8051 micro controller.
b) Explain interrupt mechanism of 16 bit microprocessor using flow chart.
8. Write short notes on any two
 - i) Multiprocessor system
 - ii) Architecture of 8084
 - iii) Timer functions of 8051 controller
