

4/4 B.Tech. FIRST SEMESTER

EE7L1

MPMC LAB

Credits: 2

Practical: 3 periods/week
Tutorial : 0 period /week

Internal assessment: 25 marks
Semester end examination: 50 marks

Learning outcomes :

After completion of the course students can able to develop assembly labguae programming by using 8086 microprocessors and 8051 microcontrollers.

They can also develop microcomputer based systems by interfacing I/o and memory devices

I. Microprocessor 8086:

Introduction to MASM/TASM.

Arithmetic operation – Multi byte addition and subtraction, Multiplication and Division, ASCII – arithmetic operation.

Logic operations – Shift and rotate – Converting packed BCD to unpacked BCD, BCD to ASCII conversion.

By using string operation- Sorting

II. Interfacing

8259 – Interrupt Controller.

8279 – Keyboard Display.

8255 – PPI.

III. Microcontroller 8051:

Arithmetic operation

Checking 5th bit

Display string

Serial communication implementation.

Programs using special instructions like swap, bit/byte, set/reset etc.