PEI5I102 MICROPROCESSOR & ITS INTERFACING

80% of syllabus covers module I and Module II

Module -I: (13 hours)

Introduction to the general concept of Microprocessor organization, architectural advancements of microprocessor, evolution of microprocessors and its applications, introduction to 8085 microprocessor, block diagram as well as its pin description, addressing modes of 8085,instruction sets and its data formats, timing diagram of 8085 instructions.

Module -II: (12 hours)

Assembly language programs of 8085, memory and I/O interfacing, memory address decoding, data transfer schemes, interrupts of 8085, 8255 PPI, 8253 timer, serial communication interface 8251, DMA controller 8257.

Introduction to 8051 Micro-controller; Basic features, Timing Diagram, Instructions 20% of syllabus covers module III

Module -III: (7 hours)

Introduction to 8086 Microprocessor, Its block diagram and pin description, memory segmentation, 8086 memory addressing, timing diagram of memory read and write bus cycle, bus controller 8288.

Text Books:

- 1. Microprocessor Architecture Programming and Applications with 8085/8080A By R.S.Gaonker (Willey Eastern India Ltd)
- 2. Microprocessors and interfacing by Douglas V Hall; Mc Graw Hill publication.
- 3. Microprocessors and interfacing by N.Senthil Kumar, M. Saravanan, S. Jeevanathan, S.K Shah; Oxford Publication
- 4. Microprocessors and Microcontrollers Architecture, Programming and system Design by Krishna kant; PHI.

Reference Books:

1. Microprocessors and Microcontrollers by Soumitra Kumar Mandal; Mc Graw Hill Publication.