

## DIGITAL ELECTRONICS - II:

### UNIT - I :

Combinational / Sequential Circuits

Combinational circuits: Half adder, Full Adder, Parallel adder, Half subtractor, Full Subtractor, 4-bit binary adder subtractor, Multiplexer, Demultiplexer, Decoder, Encoder, Parity detector.

### UNIT - II :

Sequential Circuits: Flip-Flops : Construction and working of RSFF, CKRSFF, DFF, TFF, JKFF, and JKMSFF . Counters: Construction and working of asynchronous, synchronous, up-down counter, shift registers and their types.

### UNIT - III :

Architecture of 8086 and Assembly Language Programming Block diagram of 8086, Pin diagram of 8086, Addressing modes,

### UNIT - IV :

Instruction set: Data transfer, Arithmetic, Logical, String manipulations, Control Transfer, Unconditional branch, Conditional branch, Flag, Processor control. Assembler directives and operators, simple assembly programs.