

D. F Credit [4]

Ch:-1

- conversion (1.4) {MIMP}
- binary to octal
- octal to binary
- binary to hexadecimal
- hexa.. To binary
- 1's & 2's complement
- Binary Arithmetic
- BCD Addition
- Excess-3 Code
- Gray Code

Ch:-2

- logic gates
- Boolean law {MIMP}
- Boolean properties {MIMP}}
- Demorgan's Theorems {MIMP} & examples
- NAND AS universal {MIMP}
- nor as universal {MIMP}

Ch-3

- Characteristics of Digital ICs
- 2-input TTL NAND Gates
- Comparison between TTL & CMOS

Ch:-4

- k-map [MIMP]
- SOP/POS & it's example
- Universal Gates
- Multiplexer
- 4:1/8:1 Multiplexer [MIMP]
- Implementation of combinational logic using MUX & example
- Demultiplexers
- Decoder (3 to 8 ) mimp
- Encoder mimp
- octal to binary Encoder
- half and full adder
- half subtractor
- BCD Arithmetic
- Digital comparator mimp
- IC 7485

CH:-5

- gated D Latch
- SR flip-flop
- D flip-flop {MIMP}
- JK flip-flop

master-slave JK flip-flop {MIMP}

shift register

(SISO)

(SIPO) {MIMP}

(PIPO)

Different combinational and sequential circuit {MIMP}

counters

Asynchronous vs Synchronous mimp

ripple/Asynchronous counters

Asynchronous/ripple Down/up counter

synchronous counter

4-bit synchronous binary up counter

Ch:-6

Coming soon

Ch:-7

Coming soon