CS 203 - LOGIC AND SWITCHING THEORY

UNIT-I

Number Systems: Binary Numbers, Octal and Hexadecimal Numbers, Number Ranges.

UNIT-II

Minimization of Switching Functions: Introduction, the map method, minimal functions and their properties, the tabulation procedure, the prime implicant chart.

UNIT - III


UNIT-IV

Sequential Circuits: Sequential circuit definitions, Latches, Flip Flops, sequential circuit analysis, sequential circuit design, design with D Flip-Flops, designing with JK Flip-Flops, HDL representation for sequential circuits - VHDL, HDL representation for sequential circuits - verilog.

UNIT – V

Registers and Counters: Registers, Shift registers, Synchronous Binary counters.
Ripple counter.
Symmetric Networks: Properties of symmetric functions, Symmetric relay contact networks, identification of symmetric functions.

Suggested Reading: