

# **Digital System Design using VHDL**

## **REVIEW:**

Development flow, Combinational circuits and Sequential circuits.

## **LANGUAGE CONSTRUCTS OF HDL:**

Skeleton of VHDL program, Objects, Data type and operators, Concurrent Signal Assignment. Realization of operators and data types, Timing considerations, Synthesis of Combinational circuits and Sequential circuits.

## **FINITE STATE MACHINE:**

Overview of FSM, FSM representation, Moore machine versus Mealy machine.

## **ARRAY BASED LOGIC ELEMENTS:**

Memory (ROM, PROM, RAM-SRAM, DRAM), PLDs, CPLD, PLA, FPGA.