DIGITAL SYSTEMS LABORATORY **0 0 3 2**

LIST OF EXPERIMENTS:

1. Verification of Boolean Theorems using basic gates.

2. Design and implementation of combinational circuits using basic gates for arbitrary functions, code converters.

3. Design and implementation of combinational circuits using MSI devices:

   - 4 – bit binary adder / subtractor
   - Parity generator / checker
   - Magnitude Comparator
   - Application using multiplexers

4. Design and implementation of sequential circuits:

   - Shift –registers
   - Synchronous and asynchronous counters

5. Coding combinational / sequential circuits using HDL.

6. Design and implementation of a simple digital system (Mini Project).

TOTAL: 45

LABORATORY REQUIREMENTS FOR BATCH OF 30 STUDENTS

HARDWARE

1. Digital trainer kits 30
2. Digital ICs required for the experiments in sufficient numbers

SOFTWARE

1. HDL simulator.