

CS/ EB/ EC/EE/EI 406 Digital Electronics Laboratory

1. Transfer characteristics and specifications of TTL and MOS gate
2. Design of half adder and full adder using NAND gates
3. Set up R-S & JK flip flops using NAND Gates
4. Code converters - Binary to Gray code and Gray code to Binary using mode control
5. Asynchronous UP / DOWN counter using JK Flip flops
6. Design and realization of sequence generators
7. Study of shift registers and design of Johnson and Ring counter using it
8. Binary addition and subtraction (a) 1's complement (b) 2's complement
9. Study of IC counters 7490, 7492, 7493 and 74192
10. Astable and monostable multi-vibrators using gates and also using 555 timer IC
11. ADC using dual slope method
12. Study of Multiplexer & Demultiplexer
13. ROM & RAM Chips - Verification as memories