

LIST OF EXPERIMENT WITH COURSE OUTCOME

2K6EC 408(P) DIGITAL ELECTRONICS LAB

SL. No	LIST OF EXPERIMENT	COURSE OUTCOME
1	Familiarization of Logic Gates	CO1
2	Realization of basic gates using Universal Gates	CO1
3	Verification of Demorgans Theorem	CO1
4	Half Adder & Full Adder Circuits	CO1
5	Half Subtractor & Full Subtractor	CO1
6	Adder & Subtractor Circuits Using 7483	CO1
7	Code Converters using Basic Gates	CO3
8	Multiplexes	CO1
9	Decoders	CO2
10	Realization of Flip-Flop using Gates	CO1
11	Shift Registers	CO1
12	Asynchronous Counters	CO2
13	Ring Counter & Johnson Counter	CO2
14	Synchronous Counters	CO2

CO-PO Mapping

CO	After completing the course the student will be able to design digital circuits	PO
C408.1	verifying the outputs of combinational and sequential circuits	1,2,3,9
C408.2	Design of counters, encoders and decoders	1,2,3,9
C408.3	Analysis of multivibrators and converters	1,2,3,9

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.