

## Introduction (Round 0)

1.1 Name of Developer	
1.2 Name of your Institute	
1.3 Name of Participating Institute	
1.4 Application Type	Virtual Lab Nodal Center
2.1 Lab Name and ID	152
2.2 Name of Discipline	
2.3 Target Group	

### 2.4 University

Gauhati University Assam  
 Assam Science and Technology University Assam  
 Dr. A.P.J. Abdul Kalam Technical University Uttar Pradesh  
 Anna University, Chennai Tamil Nadu  
 Visvesvaraya Technological University Karnataka  
 Biju Patnaik University of Technology Odisha  
 Punjab Technical University Punjab

### 2.5 Name of Experiments

SNo.	Experiment ID	Experiment Name
1	1125	To implement Half adder & Full adder by using basic and universal gates.
2	1126	To study Parallel Binary Adder.
3	1127	To study a BCD to 7 Segment LED display decoder as an example of a multiple input and multiple output combinational digital circuit.
4	1128	Study of Binary to Grey code converter.
5	1129	Implementation of Boolean Functions using MUX.
6	1130	To study the J-K FF and conversion of D and T flip flop to JKFF.
7	1131	To study a simple two-bit ripple counter.
8	1132	Design a synchronous up/down counter.

### 3.1 Intention of Virtualization

### 3.2 How will the student get the feel of lab?

### 3.3 Will you be using animations?

### 4.1 Frontend Technology (UI/UX)

### 4.2 Backend Technology

### 4.3 Miscellaneous Technology

**5.1 Learning Objective and Component**

**5.2 Student ability to perform in real lab**

**5.3 Outcome through Simulator**

**5.4 References**