**LIST OF EXPERIMENTS**

**Course Name :** COMPUTER ORGANIZATION AND ARCHITECTURE

**Course Code :** 18CS203J

Expt 1,2: <https://itexamanswers.net/virtual-activity-desktop-v4-1-online-courseware-free-download.html>

Expt 3,4,5: emu 8086

Expt: 6-12: Logic gate simulator

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| **Experiment No.** | **Title of the Experiment** | **Simulators** |
| 1 | Exploring Components of Virtual Desktop | Virtual Desktop Simulator |
| 2 | Assembling and Disassembling of Virtual Desktop |
| 3 | 8086 Simulator [8-bit] (Immediate, Direct Addressing Mode) | 8086 Simulator |
| 4 | 16-bit Addition and Subtraction |
| 5 | Multiplication of 8-bit numbers and Factorial |
| 6 | Half Adder, Full Adder | Logic Gate Simulator |
| 7 | Ripple Carry Adder |
| 8 | Carry Look Ahead Adder |
| 9 | Design of Array Multiplier / Binary Multiplier (2-bit multiplier) |
| 10 | Carry Save Multiplier |
| 11 | Multiplexer (4:1 multiplexer, 8:1 and 16:1 Multiplexer) |
| 12 | Arithmetic Logic Unit (Addition and subtraction arithmetic operations and AND, OR, XOR logical operations) |