## B.Sc (Hons.) IN CSE, PART-I, 2<sup>ND</sup> SEMESTER EXAMINATION, 2018 DIGITAL SYSTEMS LAB

Subject Code: 510209

Time- 3 hours

Full Marks - 40

## [N.B. - Answer any two questions.]

- 1. Verify the operations of Basic gates.
- 2. Verify the operations of NAND gate as universal gate.
- 3. Implementation of NOR Gate using basic gates.
- 4. Verify the operation of XOR gate using basic gates.
- 5. Design and implementation of a Half Adder Circuit and verify its operation.
- 6. Design and implementation of a Full Adder Circuit and verify its operation.
- 7. Verify the operation of J K Flip Flop.
- 8. Design and implementation of a 3 to 8 line decoder circuit using 74LS138 and verify its operation.
- 9. Design and implementation of a Half Subtractor circuit and verify its operations.
- 10. Design and implementation of an Asynchronous Counter.
- 11. Implementation of a Demultiplexer circuit.
- 12. Verify the operations of D/A Converter.

## Marks Distribution:

Algorithm/Circuit Design	: 10
Coding/Circuit Construction	: 10
Result	: 10
Viva	.: 10
Total = 40	

29.4.19

Quel 07.19