

## Lab Assignment-2

15-09-2018

### Note:

- The assignment to be done in batches as indicated
- Maximum marks: 03
- Deadline: 29-09-2018 (Hard deadline)
- Marking scheme: partial marks may be awarded (all the campuses will follow uniform policy).
- Answer any one of the question

### **Q1. Square root of a number**

1. You may consider any algorithm for finding the square root of a 32-bit signed or unsigned fixed point number. The output may be represented in 16.16 format (16 integer and 16 fractional bits)
2. Use VIO IP core for debugging and verification
3. The square root has to be implemented using HDL, you are not supposed to use the IP cores

### **Q2. Division**

1. You may consider any algorithm for dividing 16 bit signed or unsigned numbers.
2. Consider only fixed point numbers and the output may be represented in 16.16 format (16 integer and 16 fractional bits).
3. Use VIO IP core for debugging and verification
4. The divide operation has to be implemented using HDL, you are not supposed to use the IP cores