**COMPUTER ORGANIZATION- CSE 112 (Assignment 2)**

1. Distinguish between Interrupt Service Routine (ISR) and subroutine; LCALL and ACALL with the example? Implement any external hardware interrupts in real life applications like traffic signal lights, washing machine etc. Make your own assumptions and show the interface diagram.

2. Distinguish between different interrupts like external vs internal interrupts; vectored vs non-vectored interrupts; hardware vs software interrupts; and maskable vs non-maskable interrupts and compare their merits and demerits.

3. What is the maximum and minimum floating point number that can be represented in IEEE-754 single and double precision format? Write an algorithm for implementation of addition and substraction of the same and provide the h/w implementation with the example.

4.Write an algorithm for implementation of floating point multiplication and division with the related H/W where the numbers are represented in IEEE-754 single precision format with the example of both the operands are –ve numbers?

**Deadline: 18.9.2016**

**Individual Submissions as hard copy**

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