**GROUP – 1**

**Date:** 15/4/16

**Time:** 4:00 pm

**Members Present:** Kyrshanlang R Dkhar, Almora R Kharkamni, Jordan R Kharkrang and K Lalhriatpuia

**Discussion**: 1. Classification of Topic.

2. Distribution of sub-topic to go through:

1. Representation of Nos – Jordan
2. Fixed Point Arithmetic – Kyrshan
3. Additional of signed 2 complement - Almora
4. Subtraction of signed 2 complement -LalhriatPuia

**Date:** 18/4/16­­­­

**Time:** 12:00 pm

**Members Present**: Kyrshanlang R Dkhar, Almora R Kharkamni, Jordan R Kharkrang and K Lalhriatpuia

**Discussion:** 1. Report of the various topics.

2. Finalize sub-topics for preparing slides.

**Date:** 20/4/16

**Time:** 4:00 pm

**Members Present:** Kyrshanlang R Dkhar, Almora R Kharkamni, Jordan R Kharkrang and K Lalhriatpuia

**Discussion:** 1.Preparation of PPT: Each member will make the slides on his/her own topic and then they will all be put together.

**Date:** 29/4/16

**Time:** 3:00 pm

**Members Present:** Kyrshanlang R Dkhar, Almora R Kharkamni, Jordan R Kharkrang and K Lalhriatpuia

**Discussion in brief on the topic:**

1. By Jordan :
   1. Representation of Numbers.
      1. Number Systems
         1. Decimal Number System

Which is the system used in arithmetic

Consist of Numbers from 0-9

* + - 1. Binary Number System

Consist of two Numbers 0 and 1.

A system which the computer can easily understand.

* + - 1. Octal Number System

Consist of Numbers from 0-7

* + - 1. Hexadecimal Number System

Consist of Numbers 0-9, A-F

* + 1. BCD: Binary code decimal representation.

1. By Kyrshan :
   1. Fixed-Point Representation
      1. How fractions are represented in Computer System.
         1. Binary point.
         2. Fixed position for Binary point: Extreme left or right of Register.
      2. Representation of Binary Numbers: Positive and Negative Numbers.
         1. Positive Numbers:
            1. Sign bit is set to Zero and Magnitude is the binary
         2. Negative Numbers: Represented in Three ways
            1. Signed-magnitude form
            2. Signed-1’s complement form.
            3. Signed-2’s complement form.
2. By Almora :
   1. Addition of Signed-2’s Complement numbers
      1. Procedure of Addition.
         1. Adding numbers of same and different signs.
      2. Overflow.

Occurs when the sum exceeds the range that a register can hold.

1. By Lalhriatpuia :
   1. Subtraction of Signed-2’s Complement numbers
      1. Procedure of Subtraction.
         1. Adding numbers of same and different signs.