* Question1:What is finite precision ?

***1.Finite precision*** is decimal representation of a number which has been rounded or truncated. There are many casess where this may be necessary or appropriate

* Questio2: List the source of error ?

A. Approximation error

   - Truncation/discretization error

  - Converges error

B. Roundoff error

* Question3: Define error measurements ?

3. Measurements of error also called observational error is the difference between a measured quantity & its true   value. It includes random error (naturally occurring   errors that are to be expected with any experiment and     systematic errors caused by a miscalibrated   instrument that affects all measurements.

* Question4: Define mathematical modeling ?
* 4. A mathematical model is a description of a system using mathematical

concepts and language. The process of developing a mathematical model

is termed mathematical modeling

Question5: Define Accuracy and precision ?

* 1. Accuracy is refers to how closely a value agrees with the true value.
  2. Precision is refers to how closely the values agree with each other
* Question6: change 35.625 in to binary system

**Solution**

**Remainder**

* 35/2= 17                    1
* 17/2=8                        1
* 8/2=4                           0
* 4/2=2                            0
* 2/2=1                            0
* 1/2=0                  1
* the most significant bit is at the bottom so write the digits from lower to upper =(100011)
* The fractional part conversion
* Integer part
* 0.625\*2= 1.28           1
* 0.28\*2=0.56               0
* 0.56\*2=1.12              1
* the most significant bit is at the top so write the digits from upper to lower =(101)
* then combine the integer part conversion & fractional part conversion. The result become (100011.101)