21st April 2020

Numbers and Computers Course

Name of the course: Binary Logic

Learning Objectives

Part One -

1. The learner shall demonstrate knowledge of numbering systems.
   a. Teaching Method – Lecture material compiled by instructor, presented in slide form for self learning.
   b. Teaching Materials – Self Learning Slides (SLS), internet connectivity on desktop or laptop computer.
   c. Evaluation – Learner can demonstrate his/her understanding correctly.
   d. Lesson content –
      i. Numbers.
         1. Natural Numbers.
         2. Real Numbers.
         3. Integers.
         4. Rational Numbers.
         5. Complex Numbers.
      ii. Computer Numbering Systems.
         1. Binary.
         2. Octal.
         3. Hexadecimal.

Part Two –

2. The learner is to demonstrate understanding of how computers can represent Numbers.
   a. Teaching Method – Lecture materials handed out to the learner, presented in slide form for self learning.

b. Teaching Materials –SLS, internet connectivity on desktop or laptop computer.
c. Evaluation – Practical demonstration.
d. Lesson content –
    i. Voltage levels and signals.
    ii. Voltage levels and numbers.