

# EGC220-01 - Digital Logic Fundamentals

Quiz #1

February 1, 2021

(Submit your answers as a pdf file onto blackboard)

**Time: 25 mts total**

Name: ...Maria Hernandez.....

**(10 pts) 1. Answer True/False**

...F...A microphone converts the sound waves into digital signals.

...F....The radix of a number system with symbols 0,1,2,3,4,5,6, and 7 is 7.

...T....During counting in octal, the next number after octal 677 is the octal number  $700_8$  .

...F....The magnitude of the octal number  $(46_8)$  is 52.

...T....In hexadecimal representation, the number immediately before  $700_{16}$  is  $6FF_{16}$  .

...F....A 7-bit number can represent numbers from 0 to 128, including both.

...T....Any 18-bit number can be represented by a 4 digit Hexadecimal number.

...F....23.758 is a valid octal number

...T....Conversion of a number from Hexadecimal to Octal base can be done without conversion to decimal.

...T....In general, the number of digits in an octal representation will be less than the number of digits in an equivalent decimal number.