## **DIGITAL LOGIC DESIGN COE 202**

## QUIZ-1, Section 5

## Saturday, October 25, 2008

Student Name and ID.....

## **Digital Computer and Information**

- 1. Consider the decimal number **653.861**. Show your steps in carrying out the following conversions. Keep only three fractional digits.
  - a. Convert to binary the decimal number  $(653.861)_{10}$ :

We have  $(653.861)_{10} =$ 

b. Convert to octal the decimal number (653.861)10:

We have (653.861)<sub>10</sub> =

c. Convert to hexadecimal the decimal number  $(653.861)_{10}$ :

We have (653.861)<sub>10</sub> =

- 2. Find the Rs and(R-1)s complements of following numbers:
  - a. The binary number  $(10111001011011)_2$  has its
    - i. 2's complement as
    - ii. 1's complement as
  - b. The octal number  $(5234)_8$  has its
    - i. The 8's complement is
    - ii. The 7's complement is
  - c. The hexadecimal number (49BC)<sub>16</sub> has
    - i. The 16's complement is
    - ii. The 15's complement is