CO-Quiz 2 of 5

Total questions : 8
Marks : 10
Time : 10 minutes

* Required

During radix point alignment, shifting the mantissa left by 1 bit _____ the exponent by 1 while shifting the mantissa right by 1 bit _____ the exponent by 1. *

- ○ multiplies, divides
- ◉ decreases, increases
- ○ divides, multiplies
- ○ increases, decreases

In single precision representation the scale factor has a range of _____. *

- ◉ -128 to 127
- ○ -256 to 255
- ○ 0 to 255
- ○ None of the mentioned

A system stores real numbers in floating point format in 8-bit words. The first bit is used for the sign of the number, the second bit for the sign of the exponent, the next two bits for the magnitude of the exponent, and the next four bits for the magnitude of the mantissa. The base-10 number represents _____ in the above given 8-bit format is (10100111)2 *

- ○ -2.875
- ○ -0.359375
- ○ -1.75
- ◉ -5.75

A machine stores floating point numbers in 8-bit word. The first bit is stored for the sign of the number, the next three for the biased exponent and the next four for the magnitude of the mantissa. If you are asked to perform multiplication of 33.35 and 12.15 in the above machine what will be the answer? *

- ◉ 4.052 * 10^2
- ○ 0.4052
- ○ 4052
- ○ none of above

The result of addition of floating point numbers 4.5 x 10^3 + 6.7 x 10^2 will be _____. *

- ○ 5.3 x 10^3
- ◉ 5.2 x 10^3
- ○ 5.9 x 10^3
- ○ None of the above

Given A = 1.11 x 2^0 and B = 1.01 x 2^2. Find out the result of multiplication of binary numbers A and B. *

- (●) 1.00011 x 2^3
- ( ) 1.00011 x 2^2
- ( ) 1.0011 x 2^3
- ( ) 1.0011 x 2^2

Determine the result of evaluating the following expressions using three-digit floating point arithmetic with rounding: (113. + -111.) + 7.51 *

- ( ) 9.0
- (●) 9.51
- ( ) -9.51
- ( ) None of the above

Compute the binary floating point addition of 0.5 and (-0.4375) *

- (●) 1.0000 x 2^(-4)
- ( ) 1.1000 x 2^(-4)
- ( ) 1.0000 x 2^(-3)
- ( ) 1.0000 x 2^(4)

Submit