

Name:

Id#

COE 301/ICS 233, Term 171

Computer Architecture & Assembly Language

Quiz# 4

Date: Thursday, Nov. 16, 2017

- (i) **Q1.** What is the decimal value of the following single-precision floating-point number?

1100 0010 1110 1101 1000 0000 0000 0000. (2 Points)

- (ii) Show the single-precision floating-point binary representation for: **120.125**.

(2 Points)

- (iii) Perform the following floating-point operation rounding the result to the **nearest even**. Perform the operation using **guard**, **round** and **sticky** bits.

(6 Points)

1.000 1000 0000 0000 0000 0000 000 000 **x** 2^8
- 1.000 0000 0000 0000 0000 0100 000 **x** 2^4

