**CSCI 360-1 Quiz 4 Name\_\_KEY\_\_\_\_\_\_\_\_\_\_\_\_**

**Spring 2019 25 points Friday, 04/26/2019**

**Please carefully and clearly circle the letter representing the correct or most correct answer. Any instructions written must use all capital letters and be written very clearly. Failure to do so means no answer.**

1. We use packed decimal in Assembler programming to 1) make it easier to see decimal values in a dump of storage and 2) to assist in formatting and editing numeric data for output. (2 points)

**a. True**

b. False

1. Write the full set of instructions necessary to format a dollar amount with two decimal places, a floating dollar sign, commas and a decimal point. Be sure the set of instructions will print $0.00 if the sending field ends up being zero. The maximum dollar amount is $99,999.99. Use the names IDEPAMT, PDEPAMT and ODEPAMT. (10 points)

**PACK PDEPAMT(4),IDEPAMT(7)**

**LA 1,ODEPAMT+6**

**MVC ODEPAMT(10),=X'4020206B2021204B2020'**

**EDMK ODEPAMT(10),PDEPAMT**

**BCTR 1,0**

**MVI 0(1),C'$'**

1. Dividing a packed decimal field by another packed decimal field that is defined as the same size (in bytes) causes a S0C7. (2 points)

a. True **Causes a S0C6!**

**b. False**

1. A S0C7 is known as a \_\_\_\_\_**Data Exception**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (2 points)
2. There is a length field on both operands of the Multiply Packed (MP) instruction. (2 points)

**a. True**

b. False

1. The UNPK instruction can be used to format ***all*** packed decimal numbers for printing. (2 points)

a. True **This is only true if the packed decimal number's sign is F.**

**b. False**

1. The largest packed decimal field allowed is \_\_\_\_\_\_**16**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bytes long. (1 point)
2. The following is the printable (EBCDIC) view of a 6-byte zoned decimal number: 48597L What number does it ***actually*** represent in decimal? (2 points) (Hint: Use your Yellow Card!)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**-485973**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The SRP instruction can be used to multiply or divide packed numbers by powers of two. (2 points)

a. True **By powers of 10, not 2.**

**b. False**