Grossmont College Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_

Chemistry 102, Spring 2017 Quiz 8a (24 points)

1. (6 points) How many grams of Kl are needed to prepare 325 mL of a 1.33 M solution?
2. (4 points) How many milliliters of 5.0% (m/v) glucose solution would provide 75 g of glucose?
3. (6 points) Why is it bad to drink (in terms of osmosis):

a) Seawater?

b) Distilled water?

1. (2 points) Which of the following statements concerning electrolytes are correct?

1. All ionic compounds are strong electrolytes.

2. Weak acids, such as acetic acid, are weak electrolytes.

3. Molecular (covalent) species are weak electrolytes, provided they dissolve in water.

a) 1 only b) 2 only c) 3 only d) 1, 2, and 3

1. (2 points) The solubility of Al(NO3)3 is 73.9 g per 100 g of water. If a student adds 35.9 g of Al(NO3)3 with stirring to 50.0 g of water, what type of solution will result?
2. Saturated b) unsaturated c) supersaturated

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| 1. (4 points) Definitions | Term |
| Diffusion across a membrane when no energy is required |  |
| When a cell expends energy to move molecules or ions across a membrane. |  |
| Solute particles pass through a channel in a transport protein but no energy is required. |  |
| Some substances cross the membrane more easily than others and the passage of some substances are blocked altogether. |  |