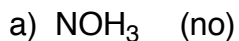


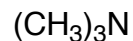
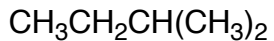
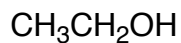
Name _____

CHE 310
S, 2008
First Hour Exam
Chapters 1-3

1 (15 pts) Draw Lewis dot structures for the following, including formal charges where appropriate. Connectivity is either suggested (YES) or not suggested (NO) by the formula. Include all lone pairs and use lines for bonds (e. g., A-B, not A:B).



2. (10 pts) Indicate, by placing the appropriate letter below the structure, whether the molecules below are held together in the liquid state primarily by Van der Waals forces (**A**), dipole-dipole interactions (**B**), or hydrogen-bonds (**C**).



3. (15 pts) Complete the reactions below and label the strong and weak acids, strong and weak bases (SA, SB, WA, WB). Curved arrows are **NOT** needed.

