Organic Chemistry I Test 2 Extra Stereochemistry Practice Problems
Page 1: Designate R/S Page 2: Chiral or Achiral? Page 3: Same, Enantiomer, or Diastereomer?

A. Designate the R/S configuration for any chiral centers in the following molecules.

$$H_2N$$
 OH OH

B. Identify each of the following molecule as chiral or achiral. (By circling the chiral ones.) Write "meso" where it applies. (In other words, if it is achiral despite having chiral centers).

$$\begin{array}{c} \text{OH} \\ \text{OH} \end{array}$$

C. Mark the relationships between the following structures as either "same", "enantiomers", or "diastereomers".

51. H CI

H, Cl Cl, H

H, CI H₃C, H

OH OH

OH OH

H CI CI H

H, CI CI, H 65. CI H H CI

H, CI CIH CI H

OH OH OH OH

H, CI CI H

H CI H CI

H, CI CI H

OH OH

OH OH OH

OH OH OH

H CI CI H CI

H, CI H, CI H, CI H, CI H

70. OH OH