I. In each series, circle the compound with the largest heat of combustion (i.e. most negative delta H of combustion). (4 points)

a.)

b.)

II. Sighting down the C2-C3 bond, draw Newman projections of the most and least stable conformations of 2-Methylbutane. (4 points)

III. Match each substituted cyclohexane structure with the correct chair conformation by placing the corresponding letter in the blank space. (6 points)

IV. Circle all of the compounds which could serve as a starting material for each indicated synthesis scheme. (6 points)