1. Write acceptable IUPAC names for the following compounds. (8 points)

- 3-(2-ethylbutyl)phenol
- 8-chloro-6-ethylquinoline
- 5-(1-hydroxyethyl)-5-hexenoic acid

Note: The compound with the OCH$_3$ was 3-(2-ethylbutyl)anisole.

2. Write the major products for each of the following reactions. (6 points)

- $\text{Cyclohexanol} + \text{H}_2\text{CrO}_4 \rightarrow \text{Cyclohexanone}$
- $\text{Cyclopentanol} + \text{NaOCl} \xrightarrow{\text{CH}_3\text{COOH}, \text{H}_2\text{O}} \text{Cyclopentanoic acid}$