CHE 242Unit VI Practice

1 Show the product of the following DA reactions:

2 Draw all resonance structures of the resulting carbocation:

- 3 Draw the structures of phenol. Toluene, meta xylenes, and aniline.
- 4 Determine if the compounds below are aromatic, antiaromatic, or nonaromatic:

5. DRAW THE PRODUCT OF THE FOLLOWING REACTION

6 Predict the EAS mononitration products of the following 4 compounds:

$$NO_2$$
 Br RO OCH_3

- 7 Show a synthetic route from benzene to meta ethyl -bromobenzene
- 8 Draw the major product of the reaction of methoxy benzene (anisole) with fuming sulfuric acid.
- 9 Explain briefly the concept of aromaticity
- 10 Explain briefly the concepts of activating vs. deactivating groups.
- 11 Explain briefly the concept of an ortho/para vs. meta director.
- 12 Explain briefly the limitations of the Friedel Crafts alkylation and how these limitations might be overcome in a synthesis.

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