

**BINGHAM UNIVERSITY, KARU**  
**DEPARTMENT OF CHEMICAL SCIENCES**  
**CHM 103 PART A**

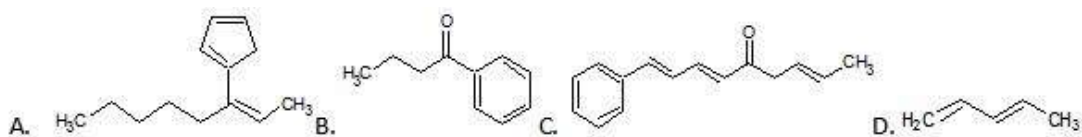
**ASSIGNMENT I**

**DUE DATE: WEDNESDAY, FEB 17th**

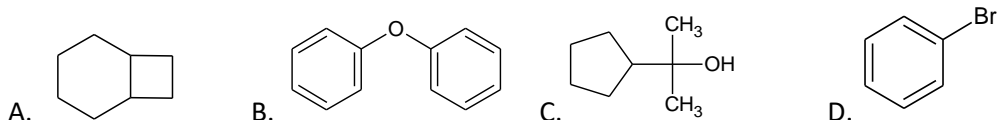
**Instruction: Ensure to submit in hardcopy (not online) handwritten paper to my office on or before the due date.**

- Which of the following compounds does NOT contain a polar covalent bond?
  - $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$
  - Ozone ( $\text{O}_3$ )
  - $\text{CH}_3\text{CH}(\text{NH}_2)\text{CH}_2\text{CH}_3$
  - $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{Li}$
- Which of the bonds shown by a dash will have the weakest polarity? Explain why.
  - H-Cl
  - H-NH<sub>2</sub>
  - H-OH
  - H-Br

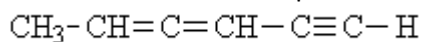
- Which of these molecules has an isolated (i.e. not conjugated) pi bond?



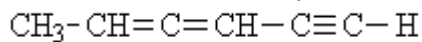
- Which of these compounds would **NOT** participate in hydrogen bonding? Explain why.



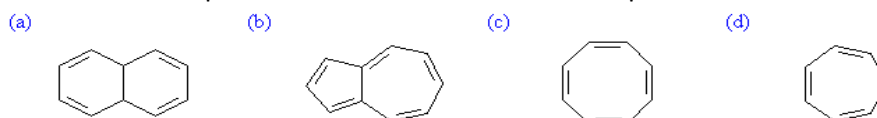
- What is the total number of pi-bonds found in the following compound?



- What is the total number of pi-electrons found in the following compound?



- Which of these compounds has a "huckel's number" of pi electrons?



- Write short notes on some Intra-molecular and Intermolecular bonds in Chemistry.