WORKSHEET

CH 10 HALOLKANES AND HALOARENES

- 1. Draw the structure of most stable carbonation with the formula $C_5H_{11}^+$. Give reason.
- 2. Draw three resonance structures that result from the ortho attack of Br_2 on toluene with FeBr₃ catalyst. Which of these structures is most stable?
- 3. Draw the structure of the product of the bromination of the following compound in presence of FeBr₃. Explain.



4. Identify A and B:

 $CH_3 - C \stackrel{-}{=} CH \xrightarrow{NaNH2, CH3I} A \xrightarrow{Na/NH3} B$

- 5. Convert:
 - i) Chloro Benzene to Picric Acid
 - ii) Benzyl chloride to benzoic Acid
- 6. Distinguish between CHCL₃ and CHI₃.
- 7. Explain the formation of these two products: $CH_3 - CH = CH - CH_2CL + H_2O \longrightarrow CH_3 - CH = CH - CH_2 - OH + CH_3 - CHOH- CH = CH_2$

8. Complete the following by identifying A to D :

$$AlCl3 \qquad Cl2 \qquad NaCN \qquad C \longrightarrow D \longrightarrow D$$

CH2COCl

- 9. A chloro compound 'A' showed the following properties
- i) Decolorized bromine in CCL₄.
- ii) Absorbed hydrogen catalytically.
- iii) Gave precipitate with ammonical CH₂CL₂.
- iv) When vaporized 1.49g of 'A' gave 448 ml of vapours at STP. Identify A and write the equations involved.
- 10. Convert nitro benzene to m-bromoiodobenzene.