

HALOALKANES AND HALOARENES

13-05-2020

Lecture-4

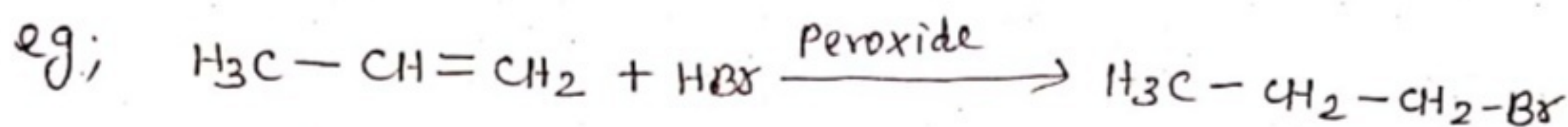
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Topic - Preparation of Haloalkanes
Continued.....

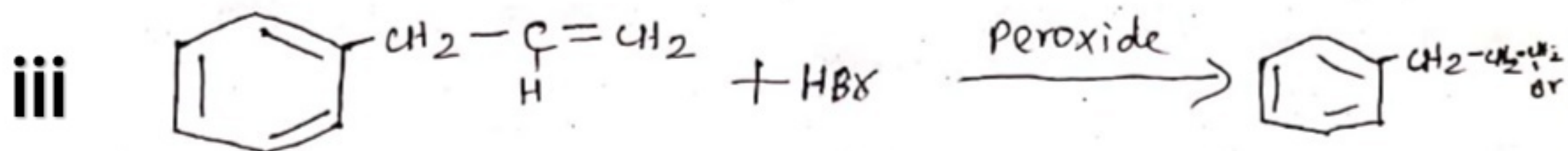
Chemistry.
Class -XII
Unit -10

Antimarkovnikov's Rule (Peroxide effect or Kharash effect)

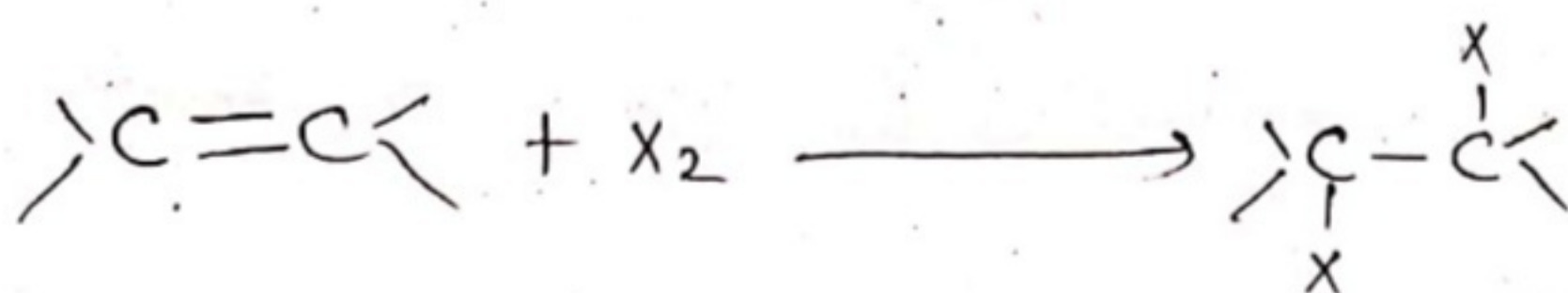
During addition of HBr to unsymmetrical alkene in presence of peroxide the 'H' goes to the carbon bearing lesser no. of Hydrogen.

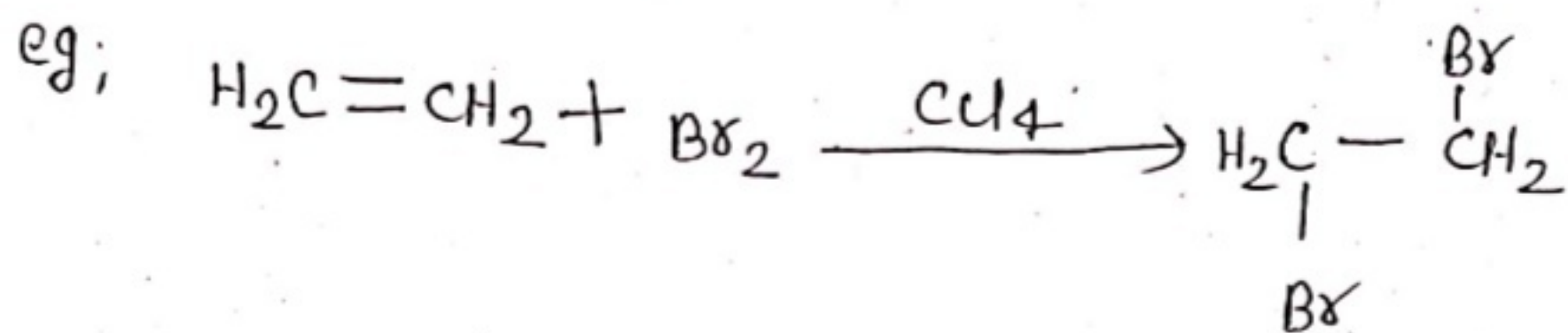


Example-10.4 (NCERT book)



C. By Addition Of Halogens to Alkene





2.

vic. Dibromide

Note 1.

When two similar halogen attached to same carbon then the dihalide is known as geminal dihalide.

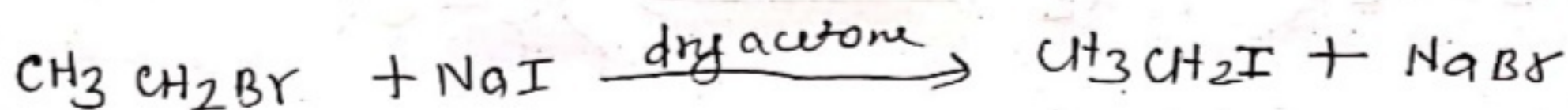
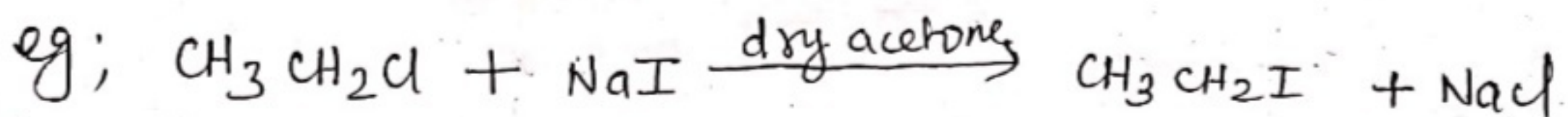
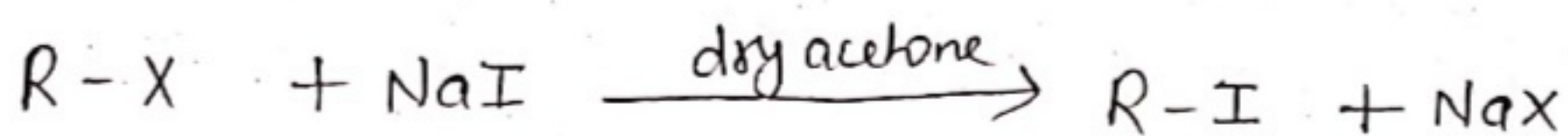
Note 2.

When two similar halogen attached to adjacent carbon then the dihalide is known as vicinal dihalide.

3. By Halogen exchange methods

i. Finkelstein Reaction

When alkyl chloride/bromides reacts with NaI, in dry acetone then alkyl iodide will form. This reaction is known as Finkelstein Reaction.



- * NaCl or NaBr is precipitated in dry acetone.
- * Due to precipitation of NaCl or NaBr, Forward reaction become faster.

ii. Swarts Reaction

The synthesis of alkyl fluorides is best accomplished by heating an alkyl chloride or alkyl bromide in the presence of a metallic fluoride such as AgF, Hg₂F₂, CDF₃, SbF₃.

This reaction is termed as Swarts Reaction.



**Preparation of Haloalkanes
Completed.....**

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