Haloalkanes & Haloarens

Q.1 Write the major product of the following reactions:

(i) $CH_3CH_2CH_2OH + SOCl_2 \longrightarrow$?

(ii) $CH_3\text{-}CH=CH_2 + HBr \xrightarrow{\text{Peroxide}}$?

(iii) $CH_3CH=CH_2 + HBr \xrightarrow[\text{of Peroxide}]{\text{Absence}}$?

(iv) $CH_3CH_2CH_2CH_2Cl + NaI \xrightarrow{\text{Acetone, heat}}$?

Q2 Write structures of following compounds:

(i) 2 chloro - 3 - methylpentane

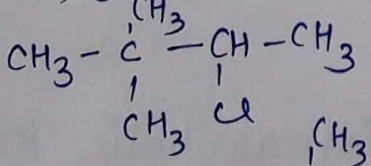
(ii) 1 - chloro - 4 - ethylcyclohexane.

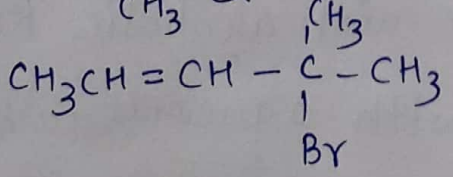
(iii) 1, 4 - ~~Di~~ bromobut - 2 - ene

Q.3 Give the IUPAC names of the following

(i) $CH_2=CHCH_2Br$

(ii) $(CH_3)_3CCH_2Br$

(iii) 

(iv) 

Q4 Short notes

1) Wartz reaction

2) Wartz fitting reaction

Q.5 Grignard reagent stored in anhydrous condition. why?

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Q.6 A soln of KOH hydrolyses $CH_3CHClCH_2CH_3$ and $CH_3CH_2CH_2CH_2Cl$. which one of these is more easily hydrolysed.

Q.7 Which one undergoes SN^2 substitution reaction faster and why?.

Q.8 How the following Conversions can be carried out?

(i) Propene to propan-1-ol
(ii) Ethanol to but-1-yne
(iii) Aniline to chlorobenzene
(iv) Benzene to diphenyl

Q.9 Suggest a possible reason for the following observations:

(i) The order of reactivity of haloalkanes is
RI > RBr > RCl

(ii) neo-pentyl chloride, $(CH_3)_3C-CH_2Cl$ does not follow SN^2 mechanism

Q.10 what happens when

(i) n-butyl Chloride is treated with alcoholic KOH.
(ii) ethyl Chloride is treated with aqueous KOH.

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