HINTS & SOLUTIONS: ORGANIC

168. [D]

OH I oxidise to 2-butanone $CH_3-CH-CH_2-CH_3$ which gives idoform test.

169. [C]

170. [D]

Ether React with H_2SO_4 and form salt \therefore It dissolve but It does not react with Br_2 , HOH or Na.

171. [C] It is Reimer Tiemann Reaction.

172. [A]

$$CH_3-CH-CH-CH_3\xrightarrow{H^{\oplus}} \longrightarrow H$$

$$CH_3OH$$

173. [D]

Viccinal diol, $\alpha\text{-hydroxy}$ carbonyl can react with HIO_4 but not Isolated diol.

174. [B]

Rate of Dehyration α stability of carbocation

175. [C]

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\$$

176. [B]

$$CH_3$$
 CH_2 CH_3 CH_3 CH_3 CH_3 CH_2 CH_3 CH_3

177. [B]

It is sandmey's reaction

178. [C]

$$CH_3$$
 CH_2 CH_2 CH_3 CH_3 CH_2 CH_3 CH_3 CH_2 CH_3 CH_3

179. [C] Bond strength α bond order α

180. [C]

181. [D]

$$CI \longrightarrow CH_3 \xrightarrow{\underset{\text{NO}}{\Theta} \text{SH}} \text{No reaction}$$

182. [A]

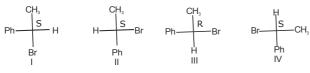
$$CI$$
 H
 O
 H
 CCI_3 - C - H
 $Chloral$

183. [C] Intramlecular cannizaro reaction.

184. [C]

Secondary butyl alcohol.

185. [C]



{II & III are enantiomers pair }

186. [C]

$$\bigcirc \longleftrightarrow \bigcirc$$

(Resonance)

187. [B]

Conc.
$$HNO_3 + Conc. H_2SO_4 \rightarrow \\ {}^{\oplus}NO_2 + H_2O + HSO_4 \\ Nitronium$$

188. [A]

 $\stackrel{\oplus}{\mathrm{NO}}_{2}$ Nitronium

189. [C]

190. [C]

It is electrophilic substitution reaction.

191. [C]

Maximum covalency of nitrogen is 4.

192. [B]

electronegativity of O > N $\{I \& III have same no. of covalent bond \}$

+ change on electronegative atom is less stable

Hence, III > I.

 \therefore III > I > II.